

ARCHAEOLOGY



Winter 1953

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Beyond the reach of cruise ships and the individual traveler—repeating a fabulous itinerary featuring the colorful cities, great sites and scenic beauty of the magic interiors of Greece, Turkey and the Middle East.

1954 ODYSSEY

February 24 to April 15

Since 1926, B. D. MacDonald has been taking Americans to sites and regions usually reserved for fireplace dreaming, in comfort and at moderate cost.

The 1954 Odyssey is sold out (eight members are subscribers to *ARCHAEOLOGY*). But it is always possible, of course, that a cancellation or two may occur before departure date. 1955 plans will lengthen the post-Odyssey extension to Turkey. A second extension will include the hanging monasteries and Salonika, the mountains of the central Balkans, the coasts and islands of Dalmatia.

Membership is limited to twenty. Roads, cars, hotels are surprisingly good. And the occasional use of American planes, owned and operated by regular lines, saves time and spares the tedium of empty miles. The pace is slow. You can enjoy what you see without that awful sense of rush and herding.

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LEBANON	Beirut, Sidon, Beaufort, Beit-ed-Dein, Baalbek, Byblos, the Cedars and hill towns	GREECE	Athens, Corinth, Mycenae, Tiryns, Sparta, Mistra, Olympia, Delphi, Thebes, Daphne, Sunium
JORDAN	Petra, Old Jerusalem, Bethlehem, Bethany, Jericho, Jerash	CRETE	Heraklion and Knossos
IRAK	Baghdad, Babylon, Shrine of Khadi-main, arch of Ctesiphon, holy city of Kerbela	TURKEY	Istanbul, Smyrna, Ephesus, Pergamon, Sardis, Miletus, Didyma

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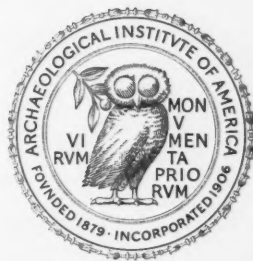
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Many things worth seeing

THE REMOTE ANCESTOR OF THE MODERN art museum was a pleasant, wooded grove at the foot of a Greek mountain. In this grove, sacred to the Muses, stood statues of these nine mythical figures, as well as images of famous poets and musicians. Also displayed were trophies from victories won in song and poetry contests. Of the place Pausanias, the indefatigable tourist, said in the second century of our era:

"People dwell round about the grove and the Thespians hold a festival here and games, called the *Musea*." The exhibits, then, were not brought together at random for the pleasure of the viewer, but were rather representations of personages, real and mythical, who were connected with the arts. The grove was the scene of activities associated with the Muses and the arts of which they were sponsors.

Since that long-ago day, conceptions of the purpose and contents of art museums have undergone many changes. From the earliest museums of comparatively modern times, in which statues were ranged along the walls like hostages awaiting execution, we have returned to the idea of the "pleasant grove," in which objects are set out attractively, so that the visitor may derive pleasure from the surroundings as well as from the exhibits themselves. The "festival and games" have become lectures and musical concerts, now considered activities proper to the art museum.

THERE IS NO DOUBT THAT MUSEUMS are appreciated in the United States as much as anywhere else, or more, but the country is so vast and the number of museums so great, that many of us are unaware of the treasures we possess. It must also be acknowledged that, unlike Pausanias of old, we do not always trouble to see the "many things worth seeing" in our own vicinity. In the meantime museum staffs are constantly at work to bring before us the best of civilization's achievements in the field of art. Among a museum's possessions, the archaeological objects—those which have been excavated from the earth or found on an ancient site—are generally the least noticed, unless they are so large and spectacular as to defy obscurity.

In a series of picture articles—of which the one beginning on the opposite page is the first—we plan to present some of the choice archaeological objects in American collections. These articles will, we hope, serve as a reminder of the precious things which are ours and of the rich enjoyment awaiting us in our own museums.

AMENHOTEP III. Egyptian, XVIIIth Dynasty, 1411-1375 B.C. This newly acquired sculpture takes its place as the finest known head of the pleasure-loving Pharaoh whose widow was Queen Tiye and whose son was the so-called "Heretic King," Akhenaten. The head is carved from dark brown granite with black, gray and rose colored inclusions and, aside from an old repair on the nose, is excellently preserved even to the remains of gesso and azurite on the great soaring shape of the "blue crown" with its originally golden uraeus. The strongly modeled ears were made separately and inserted. The long slanting eyes and sensuous mouth are clear indications of the growing Orientalism which ended in the exotic art of Amarna. Over-all height 15½ inches. Gift of the Hanna Fund, 1952.



Art and Archaeology at the Cleveland Museum of Art

FROM THE EARLIEST DAYS OF THE MUSEUM THERE HAS been a distinguished group of archaeological material in the collections. HOWARD CARTER purchased for the museum a basic collection of Egyptian objects which was later added to by the gift of an XVIIIth Dynasty "Ka" door from EDWARD S. HARKNESS. The museum also received a few works from the excavations of the Egypt Exploration Society, most notably from Armant and Amarna. Upon this basis the museum has added by purchase and gift individual pieces of outstanding quality whenever possible. Thus the Old Kingdom is represented by a set of VIth Dynasty reliefs from Saqqarah and a small standing statue of the Overseer Min-nefer from tomb G at Gizeh. There is an excellent Middle Kingdom painted wood coffin, while the New Kingdom representation, substantially enriched by the new head of Amenhotep



PRIESTLY NOBLEMAN. Egyptian, early XXVIth Dynasty, ca. 660-650 B.C. The noble wears the leopard skin of the priest but bears in his hands the staff and scepter of secular power. This limestone relief is one of sixteen of congruent style and material, exhibited together in the museum's Egyptian Gallery where they form an encyclopedia for study of the revival of art in Thebes after its sack by Ashurbanipal in 663 B.C. The sculptors of the revival were master carvers with eclectic taste, and elements of Old and New Kingdom style are present in their work, particularly the latter because of the geographic proximity of Hatshepsut's tomb reliefs at Deir el Bahari. The Cleveland reliefs are well preserved; some retain their original coloring while others are slightly unfinished, but with preliminary red lines for the hieroglyphs sketched in. Height 36½ inches. Gift of Hanna Fund, 1949.

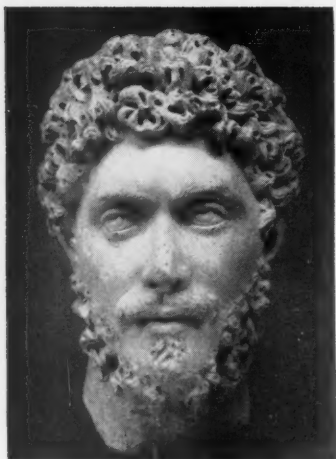
ARCHAEOLOGY

III, is shown by numerous examples of decorative art including a rare faience *pyxis*, a painted vase from Amarna and several small sculptor's sketches. While the great set of XXVIth Dynasty reliefs is the heart of the collection of later Egyptian art, there are other important works, notably a beautifully preserved engraved copper situla from Armant, an ex-voto of Hor-wed-ja, a portrait of Ankhor and one of the finest known Ptolemaic sculptures, a torso in black granite of General Amun-pe-yom. There was a "new acquisition" recently when a small head owned by the museum since 1917, previously described as XXVIth Dynasty, was cleaned and a restored nose removed to reveal an excellent XVIIIth Dynasty royal head of Hatshepsut.

The Classical collections show a good sequence of stone sculpture beginning with an archaic *poros* head of a goat, revealing the stylistic changes so well known in the thoroughly studied sculpture of Greece and Rome. The mid-archaic head of a sphinx in Parian marble, an Attic grave stele of the late fifth century and an excellent marble athlete, a Roman copy of a Greek original in the style of Polyclitus, are three outstanding pieces. The group of more than a dozen Greek and Etruscan bronzes is equally complete and even higher in quality, including a few of the most notable bronzes in this country: the mirror and stand from the Cook Collection, the Castellani *cista* handle and the Hellenistic mule's head from the Peytel Collection.

CISTA HANDLE. Etruscan, early fourth century B.C. The *Iliad* recounts the death of many heroes including Sarpedon, the beloved of Zeus. Hera says, "But if he be dear to thee and thy heart mourns for him . . . send Death and Sweet Sleep to bear him. . . ." This motif was a popular one and probably reached Etruria in visual form through the medium of vase painting. The subject was functionally ideal for a specifically Etruscan purpose, as a handle for the lid to the drum-shaped bronze containers classed as *cistae*. Numerous examples of the subject are known. The Cleveland bronze has a soft green patina and is cast with crisp detail in the armor and wings of the two *genii*, while the contrasting pathos of the dead warrior is achieved by the expressive simplicity of the nude. Height 5½ inches. J. H. Wade Collection, 1945.





LUCIUS VERUS, Co-Emperor 130-169 A.D. Roman, 170-180 A.D. This well preserved head is a striking example of Antonine virtuosity. While earlier busts had been colored, especially in the eyes and hair, now the effect was supplied by drilling and undercutting the hair and by indicating the pupil with two drill holes, simulating reflected light from the eye. Such a manner, dependent upon effects of light and shade and subtle textures, is more truly "pictorial" than "sculptural"; it suggests the transient nature of the pleasure-loving Verus whose sterner and longer lived colleague was Marcus Aurelius. Life size. J. H. Wade Collection, 1952.

Most of the major phases of Greek and Etruscan vase painting are represented. In addition to the *lekythos* illustrated we can mention only two other outstanding ceramics, a black figured *loutrophoros* in superb condition, and an unpublished red-figured *kylix* by Douris, of about 480 B.C.

The Roman collection is especially strong in portrait heads, supported by a fine Hadrianic sarcophagus with scenes from the *Oresteia* and a marble figure of a Flavian statesman, over life-size. Roman glass, jewelry, metalwork and mosaics are well represented.

The museum participated in the Joint Expedition—Iraq Excavation Fund, with the Toledo Museum of Art and the University of Michigan in the excavations at Tell Umar, from which glass, terra cottas and jewelry of the Seleucid level were acquired.

The Old Orient is sparsely represented, but in addition to

FUNERARY LEKYTHOS (detail). Greek, Attic work of the late fifth century B.C. The drawings on these funerary vases are among the most sensitive and revealing glimpses afforded us of Greek painting. The deceased warrior, nude and holding two spears, is flanked by draped mourners. The drawing in red on a white ground is suggestive of volume, free, extremely sketchy and of an informal character. Qualities such as these have appealed to the modern artist, and white-ground drawings of this type have been paid the ultimate contemporary compliment—inclusion in the repertory of PICASSO. Height $1\frac{1}{4}$ inches. John Huntington Collection, 1928.



BRONZE BULL'S HEAD. Persian, Achaemenid period, late sixth-fourth century B.C. The bull was a favorite subject in the art of the ancient Near East and probably had religious significance. This head, although without benefit of archaeological data, can be assigned to the Achaemenid period on the basis of style. The conventional treatment of the animal forms combined with a living, animated quality is characteristic of Achaemenid art and there are close parallels in the great fourth-century bull's head capitals from the palace at Susa.

The purpose which this head served is not clear. There is a flange or groove around the base of the neck for fitting it into another object. It may have belonged to a complete body, though such sculptures in the round are rare in Achaemenid art. Height 6½ inches. J. H. Wade Fund, 1942.



the rare Achaemenid bronze illustrated there is a large Assyrian alabaster relief from the palace of Ashurnasirpal II similar to the famous examples in New York. The later periods of Near Eastern art, largely of Islamic inspiration, are fully represented in the arts of the book, ceramics, and especially in textiles, including important examples of pre-Islamic origin.

Indian and Indonesian art was an early interest at Cleveland and the sequence of sculptures is particularly fine in early Buddhist works of the Kushan and Gupta periods. One of the great eleventh-twelfth century Chola bronzes of a dancing Shiva crowns the smaller number of mediaeval sculptures. The Cambodian sculptures are justly famous and show all

TAPESTRY PANEL. Egypt, late classical period, third-fifth century A.D.

The figure represents a nereid, with the familiar attributes of nimbus and scarf, in the "floating" pose so common in late classical art. The end of the scarf passing between her crossed legs is draped over the right hand, and in her left hand she holds a bowl filled with liquid, perhaps wine. The little heart-shaped rose petals in three shades of pink scattered in the lower right-hand corner are a common device of late classical textiles from Egypt, and are also known in at least one example from Syria. The vine border, with its clusters of grapes and little running birds, occurs frequently in tex-

tiles from Egyptian graves and also on Coptic sculptures. Similar figures in identical pose, wearing the same jeweled torque, earrings and elaborate headdress, are common in fifth and sixth century Coptic sculptures from Egypt, but the quality and refinement of the drawing, the sensitive face with its delicate shading and scarcely perceptible smile, suggests late classical or Hellenistic comparisons and a possible third, or at most, early fifth century date. The panel was probably once part of a large hanging, perhaps with several similar ornamental insets. Presumably the panel, with others, was woven onto the warps of a large linen cloth. Height 26¼ inches. J. H. Wade Fund, 1953.

ON THE COVER

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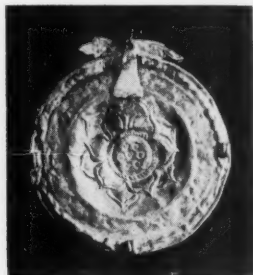
VESSEL IN FORM OF AN OWL. Chinese, Late Shang or early Chou Dynasty, 1200-1000 B.C. Bronze casting in China was presumably learned from the Near East, but by the end of the first millennium the art had been so well perfected that vessels of extraordinary refinement in both detail and shape could be cast from molds or by the lost-wax method. The designs were animistic and formed a symbolic language well contained by the shapes prescribed for ritual. The rarest vessels are those in animal or bird forms, in which the owl plays a prominent part, usually in combination with the serpent which in this case is a boundary for the wing. The patination is olive-brown. Height 8¼ inches. John L. Severance Fund, 1951.



BIRDS AND SNAKES. Chinese, from Ch'ang Sha. Late Chou Period, fifth-third century B.C. The clandestine excavations at Ch'ang Sha in Southern China revealed new material of critical importance in widening the horizons of early Chinese archaeology. Rich finds were made in wood and lacquer; and new and exotic subject matter underlines the importance of the South in the rich ferment that preceded the unification of China by the Ch'in empire. The use of this extraordinary lacquered wood sculpture is problematical. It may have been a drum stand or a guardian image. The birds have peacock feathers, but may be a composite form—early phoenixes. The lifting pull of the birds' necks contrasts with the coiling earth-bound movement of the paired snakes to produce an unforgettable effect in this, the largest and best preserved of all Chinese sculptures left from before the time of Christ. Height 4 ft. 4¾ inches. J. H. Wade Collection, 1938.

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GOLD AND CARNELIAN PENDANT from Sirkap, Northwest India. Saka-Parthian period, ca. 50 B.C.-50 A.D. This fine pendant comes from the ancient city site of Sirkap. The figure worked in repoussé appears to be the *yakshi* Hariti. Her dress is the classical tunic, and on her head is a low *polos*. In her right hand she holds an open lotus flower and in her left an open lotus supporting a bowl of fruit. The latter is a form of cornucopia. Surrounding this central figure is a circle of carnelian inlays. On the back of the pendant a lotus rosette decorates the plain surface. Diameter 2 inches. J. H. Wade Fund, 1953.



SEATED STONE FIGURE. Mexico, Olmec Culture, second or first century B.C. The pre-Columbian collection is especially rich in Olmec or La Venta material such as this large seated figure or the smaller jadeite masks and statuettes. Conceived in the full round, powerfully yet simply modeled, this torso recalls the somewhat larger complete "Wrestler" of the Corona Collection. Both have opened our eyes to the extreme sophistication of this early culture, largely unknown until STIRLING's first report of 1939. While a considerable number of objects have been found, our knowledge of the makers remains nebulous. Height $10\frac{1}{2}$ inches. Mrs. R. Henry Norweb Collection, 1951.



major phases from the early "Pre" Khmer work of the sixth and seventh centuries to examples from Angkor Vat and the "Terrace of the Leper King" of the Bayon. An excellent head from Borobudur and a small bronze Vairocana illustrate the art of Central Java.

The Far Eastern collections, especially those of China and Japan, are too full to describe in even a summary way. Early bronze age culture, including ritual bronzes, carved jades, pottery, etc., is well represented—the whole sequence culminating in the unique and world famous lacquered wood *Birds and Snakes* illustrated here. Korean archaeology is represented at Cleveland largely by ceramics, while Japan shows a large bronze "bell" (*Dotaku*) of the pre-Christian era and a few small jade, quartz and metal artifacts. The great wealth of the Far Eastern collection is in the sophisticated later arts of China and Japan: Buddhist sculpture and painting, porce-

PAINTED CLOTH, probably a mantle border. Peru, South Coast, Paracas, Early Period. The procession of richly costumed demon-figures with elaborate headdresses and ornaments, who bear trophy heads in their hands and whose tails end in other trophy heads, is very close in style to the paintings on contemporary ceramics from the Nazca valley. The large scale here provides a better opportunity to observe the quality and character of early Peruvian graphic art than can be derived from the ceramics of the period.

The design is painted in shades of rust and brown, black shading through several tones of gray, and blue on a natural colored cotton ground. At the lower edge is an applied border of brown wool edged with orange-red fringe.

Painted textiles from Paracas are exceedingly rare; only one other example, now in the Lima Museum, is recorded. Width 8 ft. 4 in., height 2 ft. 3 in. Gift of Mrs. R. Henry Norweb.





ECCENTRIC FLINT IN HUMAN SHAPES. Maya, Classic period, 731-987 A.D. The "eccentric" flints are among the most delicate evidences of the lapidary skill of the ancient Maya artists. Absolute control of the flaking and chipping process was necessary to achieve the four slant-headed profiles in this example from Honduras. While this was probably a staff end, other simpler varieties were used as foundation deposits beneath walls and buildings. The metamorphosis of one form into another with the multiple use of the flint members as profiles, arms and headdresses is particularly notable. Height $13\frac{3}{8}$ inches. John L. Severance Collection, 1950.

FRONT OF A WOODEN LITTER. Peru, Chimu culture, thirteenth-sixteenth century. The wood is brilliantly painted. The costume of each applied figure is formed by thin copper and the border at the edge is decorated with a serrate and dot design. The crescent shape of the headdress is repeated in the neck ornament which terminates in bird heads. The oval eyes are inlaid with mother-of-pearl; round holes are bored into their centers and a dark inlay is used for the pupils. The wooden borders of the litter are carved in low relief. The figures on this unique object bear comparison with those of suggested eleventh-century date found at Huaca el Dragon on the Peruvian coast (see SCHAEDEL in *ARCHAEOLOGY* 4 [1951] 16-22). Height $23\frac{3}{4}$ inches. J. H. Wade Fund, 1952.



lains, jades and the secular painting styles of China and Japan.

Pre-Columbian art is richly represented at Cleveland. The main types of Peruvian potteries and textiles are represented in works of the highest quality, the illustrated Paracas painted cloth being only one of many. The museum shares honors with The American Museum of Natural History and the Bliss Collection in Washington in its display of the amazing sculpture and carved jade of the early Olmec cultures. With this as a foundation, the successive levels of culture in Central America and Mexico (Maya, Totonac, Toltec, Aztec, etc.) are presented in characteristic media but with special emphasis on stone sculpture, carved jade and gold. The pre-Columbian section at the museum has grown rapidly and shows no sign of decreasing energy. Here, as in the other collections reviewed, the ultimate purpose is clear: to show the art in archaeology.

KING NESTOR'S PALACE

New Discoveries

By Carl W. Blegen

Professor of Classical Archaeology, University of Cincinnati

ALTHOUGH ACTUAL DOCUMENTARY EVIDENCE of identification is still lacking, there can be little if any doubt that the Mycenaean palace which was partly revealed in excavations last year at Epano Englianos in Western Messenia is that of Nestor, King of Ancient Pylos, whose participation in the Trojan War is recorded by Homer [see *ARCHAEOLOGY* 5 (1952) 130-135].

A second campaign of digging was carried out from May 20 to July 30, 1953. The Megaron, comprising Throne Room, Vestibule, Portico and a narrow court, was re-exposed and fully cleared (FIGURE 1). The walls, the central hearth and the floors were thoroughly cleaned. A careful study was made

of the painted decoration on the hearth and floor of the Throne Room and these are being recorded in water-color drawings. All remains of frescoes, both those still attached to the walls and those that had fallen to the floors, were removed and conserved. Much patient cleaning is still required before these frescoes can be properly evaluated.

An extensive area to the southwest of the Megaron was uncovered. Directly alongside the Throne Room seven small chambers were revealed (FIGURE 2). Four of them were obviously pantries in which the ordinary household crockery of the palace was stored. In these rooms were found remains of nearly six thousand vases of many different shapes, among which



Fig. 1. The Throne Room of the Palace from the north. To the left are the Vestibule and Portico. The main excavations of 1953 are shown in the background to the right.



Fig. 2. Chambers alongside the Throne Room, which is at the right. These were pantries that contained nearly 6000 vases.

kylixes, "teacups," and saucers are predominant. Most of the pots were broken, but more than one hundred were recovered intact (FIGURE 3), others were mended. All the chief Mycenaean forms are well represented. Besides the pottery, innumerable fragments of frescoes, in large part fallen from an upper story, were salvaged from the debris in these rooms.

Beyond the pantries, to the southwest, is a stucco-paved court, about twenty-four feet wide. The lowest course of an ashlar wall is preserved along the southwest side; on the other side had once been a similar wall, presumably removed by marauders in search of building material.

TO THE SOUTHWEST of the court are two rooms of state, each more than twenty-three feet wide and thirty-three feet long, with a good stucco floor. The first (FIGURE 4) was entered from the southeast through a two-columned facade, and in the longitudinal axis stood a single interior column. The columns, which were no doubt made of wood, have perished, but their stone bases still lie in place and impressions in the contiguous stucco floor indicate that the shafts had forty-four shallow flutings (FIGURE 5). The walls of this room bore plaster painted with brightly colored designs, and vast numbers of fallen fragments of frescoes lay heaped up on the floor. To the right of

The excavation at the palace is the Cincinnati sector of the work undertaken by the joint Hellenic and American expedition. My colleague, Professor Sp. Marinatos, representing the Greek Archaeological Service, continued his investigation of chamber tombs in the Mycenaean cemetery at Volymidia above the village of Chora.

Members of the staff at the palace were Miss Marion

Rawson, Miss Rosemary Hope, Lord William Taylour, Demetrios Theocharis, Piet de Jong and W. A. McDonald. J. L. Caskey, director of the American School of Classical Studies, and Miss Alison Frantz of the Agora Excavations gave invaluable help. The necessary funds were provided in the name of the University of Cincinnati by Professor and Mrs. W. T. Semple.—C. W. B.



Fig. 3. Some of the small drinking cups found in the pantries. The central one is a kylix.

a doorway that opens into the second room of state, toward the southwest, is a low stucco platform, either a place for a seat, or a stand for a sentry or a servant. A doorway to the northwest gave access to a passage from which a stairway ascended to an upper floor, while two other doors led to apartments not yet excavated.

Little is preserved of the similar large room at the extreme southwestern edge of the hill, which also had a well-laid floor, interior columns (one base still in place) and frescoed walls.

A small excavation on the descending slope to the southeast of the Megaron disclosed a maze of walls,

badly damaged in the fire that destroyed the palace about 1200 B.C. Here, too, there were evidently corridors and a stairway leading to the upper story. Many fragments of frescoes were found in this area.

MORE THAN A dozen soundings were made along the steep periphery of the site. House walls appeared almost everywhere, but no evidence has yet come to light to indicate that the citadel was enclosed within a cyclopean fortification wall.

On a small hillock barely eight-five yards to the northeast of the palace site remains of a great lintel block, observed long ago, betrayed the presence of a



Fig. 4. Room of State in southwestern quarter of the Palace, with a two-columned entrance. Seen from the south.

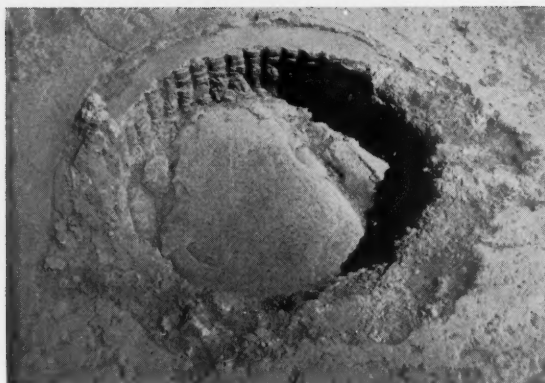


Fig. 5. Column base and impressions of flutings in stucco floor.

tholos tomb. Its excavation required nine weeks of unremitting toil. The chamber (FIGURE 6) proved to have a diameter of about thirty feet, nine inches. Its

wall, preserved to a height of more than fifteen feet, was carefully built of remarkably small unworked stones, laid in fairly regular courses. The doorway, constructed of much larger blocks of limestone, was about seven and one-half feet wide, about fifteen feet deep from front to back, and over fifteen feet high. It was probably once covered by three lintel blocks, only the innermost of which, broken into four pieces, survived in situ. The *dromos*, or entrance passage, nearly fifteen feet wide and over thirty feet long, had been cut in hardpan and was not bordered by walls. The doorway was blocked by a massive, well built wall, about seven feet thick, which was found still standing almost to its original height.

THE CHAMBER WAS filled with hard-packed clayey earth. Much of it, evidently brought from an adjacent inhabited site, had probably formed part of a tumulus that was heaped up above the dome. Robbers had gained an entrance, presumably while the vault

Fig. 6. Chamber of Tholos Tomb. The walls, now preserved to about half their original height, once rose to form a beehive-shaped dome which was covered with earth.



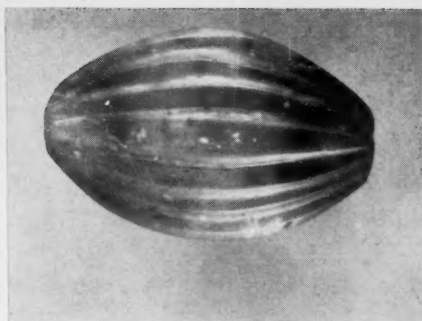


Fig. 7. Amethyst Seal found in the Tholos Tomb. At left, an impression showing a man in combat with a lion; at right, reverse of the seal.



Fig. 8. Gold signet ring from the Tholos Tomb.

still stood intact, and the tomb had been thoroughly ransacked. Even a stone-lined cist at the right and a deep curving grave pit at the left had not been spared. No skeleton was found in order, but small bits and splinters of human bones, no doubt from several burials, lay scattered helter-skelter through the deposit. The disturbers were careless in their operations, and the numerous objects they overlooked give a tantalizing idea of the wealth of funerary offerings that had been placed in the sepulcher. Apart from a vast quantity of gold leaf and hundreds of beads of amber, amethyst, faience, gold, paste, etc., and many fragments of ivory, the most notable items recovered are two amethyst seal stones, one of amygdaloid shape with intaglio representing a man in combat with a lion (FIGURE 7); a gold signet ring bearing on its bezel a cult scene (FIGURE 8); six owls neatly delineated in repoussé technique in thin gold (FIGURE 9); a gold shield-shaped ornament in the form of a figure-eight; and a large flattened cylindrical gold seal with a delicately worked representation of a crested griffin, a truly

royal gem. Close determination of the date of the tomb must await further study of the abundant material it produced.

In conformity with the broader scope of the joint expedition, wide explorations were carried out by W. A. McDONALD in the region to the north, west and south of Epáno Englianos, and several previously uncharted Mycenaean sites were discovered. Trial trenches were also dug in the "Cave of Nestor," in the precipitous northerly declivity of the ancient Korymbhion. They provided quantities of pottery ranging from neolithic through Early, Middle and Late Helladic into historical times.

Fig. 9. Owl of thin gold from the Tholos Tomb.



Figures 1 to 6 from photographs by Alison Frantz

An Ornament from an Assyrian Throne

By Edith Porada

Edith Porada, a native of Vienna, Austria, received the Ph.D. degree from the University of Vienna in 1935. Since then her studies and researches have been pursued in England, Germany, France and, since 1937, in the United States. Dr. Porada's main interest is Near Eastern cylinder seals. She has published several important collections of these, and at present is working on a corpus, of which the first volume has appeared. She has been on the staff of the Oriental Institute, Mills College, the Metropolitan Museum of Art, the Asia Institute and New York University. At present she is teaching at Queens College, New York.

THE CITY ART MUSEUM OF ST. LOUIS HAS for many years been in possession of a small fragment of Assyrian carving in ivory (FIGURE 1). The fragment consists of the head and upper body of a figure whose horned miter characterizes him as a divine being. The headgear, however, is not that of the great gods but rather of the genii so frequently found on the wall reliefs of Assyrian palaces of the ninth to the seventh century B.C.

The genius has a strongly marked eye and eyebrow, seen in front view, an aquiline nose with accentuated nostril and a heavy beard. His miter is surmounted by a crest and has three pairs of horns, which are indicated in side view. The lowest and shortest horn turns up at a sharp angle while the others are more rounded. Gold leaf with delicate punched patterns covers the entire miter and serves to emphasize its lines. The horns are covered with zig-zag patterns; their outlines, furthermore, are repeated by parallel grooves leading from a point above the top of the third horn to the back where they form a scalloped line that echoes the ends of the horns and terminates at the neckpiece.



Fig. 1. Fragmentary ornament of ivory in the City Art Museum of St. Louis, showing a beneficial genius. (Courtesy of City Art Museum, St. Louis)

Over the grooves is a line of dots and above that a palmette pattern ending in the back above the scalloped line. Another area of palmette pattern over dots and grooves forms a semicircle at the top of the miter; between this upper semicircle and the pattern around the horns the gold leaf is damaged and no clear pattern is visible. The crest of the miter consists of two leaves from which rises a plant or fruit. In front the miter has a horizontal rim, and in back a neckpiece with three deep parallel grooves. Below the miter the hair forms a short sideburn covering part of the ear, and in

Fig. 2. Detail of a relief from the palace of Ashurnasirpal II in Nimrud, showing a winged genius. (Courtesy of Metropolitan Museum of Art)

back it is arranged in five tiers of bead-like curls. Immediately below the sideburn the beard starts with small curls that grow progressively larger, outlining the cheek in a scalloped curve and surrounding the lips and moustache. The lower part of the beard is formed by two rows of corkscrew curls indicated by rectangular columns with horizontal strokes and ending in a horizontal row of bead-like curls. The beard and hair are separated by the ear and earring. The latter is covered with gold foil and has a column of short horizontal markings in the center.

The figure is shown wearing a mantle over a short-



Fig. 3. Relief from the palace of Sargon II in Khorsabad, now in the Louvre Museum. (*Encyclopédie photographique de l'art* I, 306)



sleeved shirt. The sleeve border is indicated by parallel grooves below a row of circles. The mantle (as we know from complete representations) was a rectangular piece of material with border and fringe, which was worn like a shawl, pulled up under the left arm and laid over the right shoulder. Here the border is indicated by concentric squares between parallel grooves, the whole covered with gold leaf. A small piece of fringe is preserved on the right shoulder.

Comparison with the figure of a genius (FIGURE 2) from the reliefs of King Ashurnasirpal II (883-859 B.C.) immediately indicates that our piece could not be contemporary. Despite its fragmentary state it can be inferred that our figure was more vertical. Contributing to this effect are the horns lying snugly against the cap, the hair worn not in a mop projecting obliquely in back but resting solidly on neck and shoulder, and a narrower extension of the shoulders owing to the near-profile rendering of the figure. Lastly, the carving seems to accentuate a certain roundness in the modeling rather than the purity of line and pattern in the reliefs of Ashurnasirpal II.

TURNING TO A relief (FIGURE 3) of Sargon II (721-705 B.C.) we find that the qualities of our figure—the verticality, near-profile rendering and greater roundness in the modeling—are also present here. Moreover, the miter, earring, fashion of dressing the hair and beard and the facial type, are almost identical in FIGURES 1 and 3.

Fig. 4. Drawing of a relief from Sargon's palace showing the king's chariot. (Botta and Flandin, *Monument de Nineveh*, Paris 1949-50)

The results of this comparison are convincing enough to date our piece in the time of Sargon II, and we may now inquire into the significance of our object. The unworked condition of the back indicates (by analogy with ivories found in Assyrian palaces) that our fragment must have decorated a piece of furniture.

IN ORDER TO identify the precise piece of furniture from which our fragment could have come, we have to examine it again to see exactly which type of genius is represented. From what remains of the left arm and right shoulder it is obvious that the arms could not have been raised above the head to support a seat, a posture often found in the reliefs showing the king's furniture being carried by palace attendants.

The left arm could not have been raised as high as that of the genius in FIGURE 3, although it definitely did not hang straight down. It is also certain that the genius of our fragment could never have had wings, for some traces of them would have remained behind the mop of hair.

Wingless genii walking without their arms raised above their heads are found in only two pieces of furniture shown in Sargon's reliefs: his chariot (FIGURE 4) and his throne (FIGURE 5). The choice between the two is easily made, for the miters of the genii on the chariot have a horizontal band, while those on the throne have three horns like the miter of our figure.

We are therefore probably quite safe in assuming that the fragment in St. Louis really comes from the throne of Sargon. Of this it might be said, as of King Solomon's throne, "Moreover, the king made a great throne of ivory, and overlaid it with pure gold."

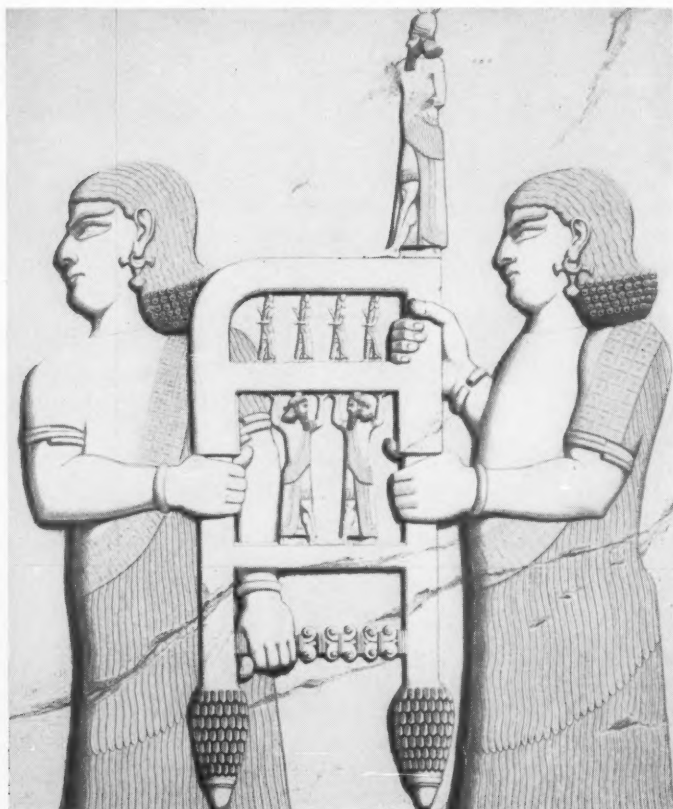


Fig. 5. Drawing of a relief from Sargon's palace showing the king's throne. (Botta and Flandin, *op. cit.*)

New Excavations at Boghazköy, Capital of the Hittites

By Hans G. Güterbock

THE FIRST WESTERNER TO SEE THE RUINS OF Boghazköy, about one hundred miles east of Ankara, was the French archaeologist CHARLES TEXIER, in 1834. What he saw above ground were the city ramparts, the layout of the Great Temple, and the rock sanctuary of Yazilikaya. At that time no one could even suspect that these monuments were Hittite. In 1893-94, another Frenchman, ERNEST CHANTRE, found there clay tablets written in cuneiform characters but in a hitherto unknown language. It was mainly because of these texts that the German

Assyriologist HUGO WINCKLER visited Boghazköy in 1905, and in the following years (1906, 1907, 1911 and 1912) he excavated there with THEODORE MARKIDI BEY of the Istanbul Museum. The great contribution of these men was their discovery of about ten thousand fragments of tablets. From texts written in Akkadian (the language formerly known as Babylonian) WINCKLER saw at once that he had found the archives of the kings of the Hittites. The Hittite language, in which the bulk of the texts is written, was deciphered in 1915 by the Czech scholar BEDRICH

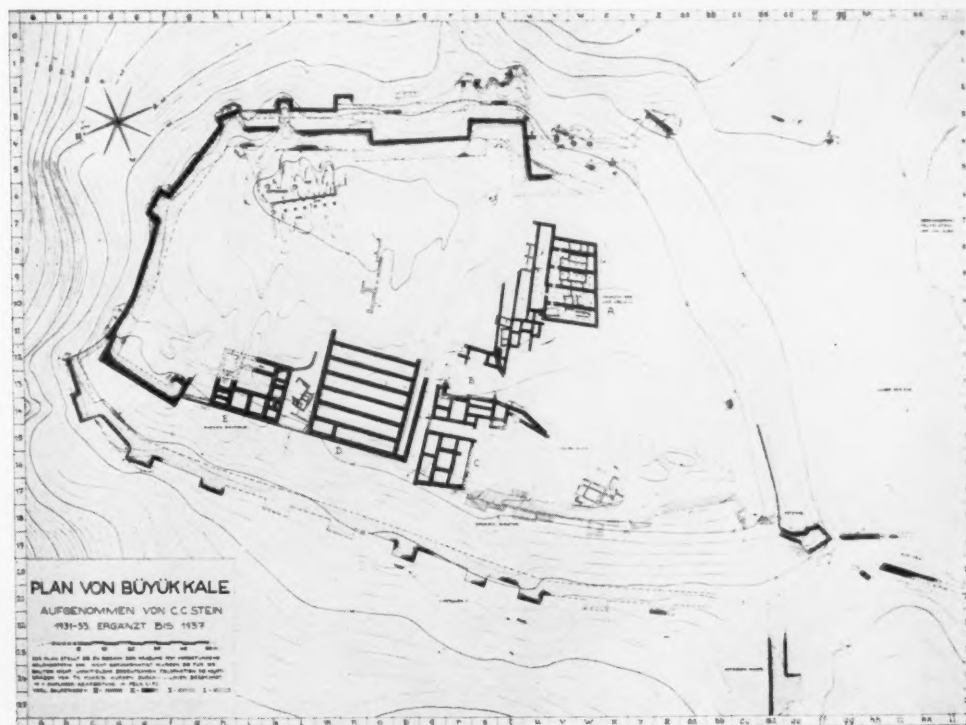


Fig. 1. Plan of Büyükkale as excavated through 1937, showing the Hittite Empire buildings in black. (After K. Bittel and R. Naumann, *Boğazköy II*, plate 1)

The author's association with Boghazköy goes back to 1933-35, when he was epigraphist on the staff of the expedition headed by Dr. Kurt Bittel. He was sent by the Deutsche Orient-Gesellschaft, which sponsored the excavations together with the German Archaeological Institute. In 1952, Dr. Güterbock, now Associate Professor of Hittitology at the University of Chicago, returned to Boghazköy, where work was once again resumed under the direction of Dr. Bittel. The campaign was sponsored by the Deutsche Orient-Gesellschaft, with funds furnished by private donors in Western Germany and by the Deutsche Forschungsgemeinschaft. Dr. Güterbock's participation was made possible by a grant from the American Philosophical Society. The official preliminary report on the 1952 campaign, by Kurt Bittel, Rudolf Naumann, Heinrich Otten and Hans Güterbock, has appeared in *Mitteilungen der Deutschen Orient-Gesellschaft* No. 86.

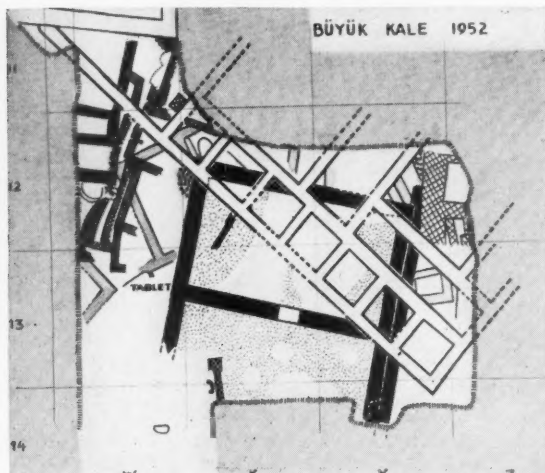


Fig. 2. Schematic plan of area excavated on Büyükkale in 1952 (for location see squares 11-14/w-z in Fig. 1).

Legend:

- Walls in outline = Empire (Level III); corner of Building A in upper left.
- Walls in narrow cross-hatching = Level IVa
- Walls in full black = Level IVb
- Walls shaded = Level IVc
- Walls in wide cross-hatching = Level IVd
- Dots = Level V

rected by OTTO PUCHSTEIN. The results were published in a comprehensive volume (OTTO PUCHSTEIN et al., *Boghazköi. Die Bauwerke*. Leipzig 1912).

HROZNY and it proved to be of Indo-European affiliation. The understanding of Hittite has made steady progress ever since; a good presentation of the information gathered from the Hittite archives can be found in O. R. GURNEY's book, *The Hittites* (reviewed in this issue, pages 249-250).

In 1907 the most outstanding buildings of Boghazköy were investigated by another expedition, sponsored by the German Archaeological Institute and di-

AFTER THE FIRST World War, when archaeological methods had been more developed and the stratigraphy of Central Anatolia was being established by the Anatolian Expedition of the University of Chicago's Oriental Institute, it was felt necessary to re-investigate Boghazköy. A joint expedition of the German Archaeological Institute and the Deutsche Orient-Gesellschaft was led by Dr. KURT BITTEL. Work began in 1931 and continued every summer until 1939 when it was interrupted by the Second World War. Some of the results of these excavations are now available in the first volume of the final publication (KURT

Fig. 3. Relief found re-used in Level IVa. Limestone, 0.46 m. x 0.23 m. (Border preserved on top and right side; left and lower edges broken.) From the right, a man followed by another figure thrusts a spear against some strange being who is also attacked from the left by a man with raised dagger. The personage being attacked seems to be a god with pointed cap, hanging upside down from the upper border. (After a drawing by R. Naumann)





Fig. 4. Large building of Level IVb, Büyükkale, seen from east.

BITTEL and RUDOLF NAUMANN, *Boğazköy-Hattuša. Ergebnisse der Ausgrabungen . . . 1931-1939* I. Stuttgart 1952). They may be summarized as follows:

(1) Most, although not all, of the royal acropolis, Büyükkale, was excavated and mapped.

(2) Büyükkale yielded the following stratification:

Levels I and II: Post-Hittite, so-called Phrygian.

Level III: The Hittite Empire (ca. 1400-1200 B.C.) with large buildings (FIGURE 1).

Level IV: "Old Hittite," mostly dwellings, wheel-made pottery distinct from that of the Empire. Several building levels could be distinguished within this period.

Level V: Transition from hand-made to wheel-made pottery (roughly 2000 B.C.), reached in spots only.

(3) Among the Empire buildings on Büyükkale (Level III) a new archive was excavated (building A in FIGURE 1) which yielded some four thousand fragments of tablets. The circumstances under which tablets were found here and elsewhere were recorded.

(4) A deposit of seal impressions on clay "bullae" was found (southwest corner of building D). Among them were bilingual royal seals (cuneiform and Hittite hieroglyphs) through which the hieroglyphic names of almost all kings of the Empire could be identified. This provided a new chronological framework for the study of Hittite art (H. G. GUETERBOCK, *Siegel aus Boğazköy I and II*. Berlin 1940 and 1942).

(5) Outside Büyükkale, the excavation of two buildings left unfinished by PUCHSTEIN was completed: Temple V in the upper city, formerly called a

Fig. 5. Interior of corbeled passage on Büyük Kaya. Inner height ca. 1.60 m.





Fig. 6. The tomb rocks seen from Büyük Kaya. At the left, foreground, is Makridi's rock; the next rock to the right (with the small excavation dump on its left side) is the one where burials were found in 1952. A short way beyond it is a small tumulus.

"palace" (KARL KRAUSE, *Boğazköy. Tempel V.* Berlin 1940), and a building above Temple I, the so-called "House on the Slope" (BITTEL and NAUMANN, *Boğazköy II. Neue Untersuchungen hethitischer Architektur.* Berlin 1938, 20-30).

(6) A section of the living quarters in the lower city north of Temple I was excavated. It had two main levels, one of the Empire period, the other of an older age including documents of an Assyrian merchant colony of the nineteenth century B.C.

(7) In front of the rock sanctuary of Yazilikaya a temple was excavated. The rock reliefs and their hieroglyphic inscriptions were studied (BITTEL, NAUMANN and OTTO, *Yazilikaya. Architektur, Felsbilder, Inschriften und Kleinfunde.* Leipzig 1941).

IN 1952 BITTEL was able to resume his work. One of the main tasks was, of course, an attempt to bring the excavation of Büyükkale, the royal acropolis, nearer to completion. Since the bedrock of the hill slopes down from northeast to southwest, the accumulation of debris is thickest and the possibilities for stratigraphical observation are best in the southwestern part. A trench in this region which, in 1939, had reached only the top level (I) was now deepened and widened and the following levels were established (FIGURE 2):

Level III: Hittite Empire. A large building, linked to the Archive (A in FIGURE 1) was partly excavated. Since only foundations were found and the greater part of the building is still underground, nothing can

be said about its plan. The row of seven small "rooms" along its front may be nothing but the substructure of an open portico; boulders which may have been the pillar bases were found re-used in Level II above it. To the north and west of this front there was an open square or large court, bordered on the opposite side by the protruding part of building B and extending westward to the Phrygian citadel wall which still covers whatever entrance to the court there may have been.

Level IV could now be subdivided into four building levels, numbered IVa-d (a, at the top, is the latest).

In IVa, narrow walls of insignificant buildings were found. Built into one of these walls was a fragmentary limestone relief (FIGURE 3) which, therefore, must be older than IVa and is the first example found of large-size Hittite sculpture older than the Empire. Executed in flat relief, it showed traces of red paint on the raised surfaces. It depicts a struggle, probably between gods, in other words, a mythological scene; the



Fig. 7. The tomb rock investigated in 1952, from west. The deep shadow marks the overhang under which the burials were found, with excavation dump in front.

execution of the one figure which is better preserved is close to representations on pre-Empire seals.

In Level IVb, a large building was found (FIGURE 4). The main room is 14 x 8 meters with a door in the center of one of the long sides. Whether the protruding parts of the side walls ended like antae, or whether they were connected by another cross wall, could not be determined.

Next is Level IVc, with medium-size houses. In the clay floor immediately outside one of the rooms of IVc was found a fragment of a cuneiform tablet. It is a historical text written in the Old Hittite language and describing, in a literary style, the struggles of a king with the rulers of Halap (Aleppo) and Hassu (another town in North Syria). Judging from where it was found this seems to be the first example of an Old Kingdom text come down to us in the original, not in an imperial copy. From the type of writing and orthography, it cannot be older than the time shortly before the Hittite raid on Babylon (ca. 1600 according to SIDNEY SMITH'S chronology).

Level IVd was reached only at the southern edge of the excavated area. It can be dated by its pottery to the time of the Assyrian merchant colonies. A tablet of the colony type, found in 1931 on Büyükkale above the rock but not really stratified, can now, on the evidence of the pottery, be ascribed to Level IVd.

Level V was reached in a few small spots which did not yield architectural remains. Its pottery is a mixture of hand-made (Alishar Copper Age) and wheel-made (Hittite) wares.

APART FROM THE one old tablet just mentioned, cuneiform texts were found in various spots. In the area just described they appeared only in the debris above the Empire level. Obviously they had come there after the destruction of the imperial buildings, probably from the nearby Archive (building A). The west side of Büyükkale building D, which had been left unfinished in 1939, was investigated a little farther toward its eastern (inner, higher) side. Although it could not be completed, this excavation also yielded some tablets in the easternmost storeroom where some had been found in 1939. Here the circumstances indicated that the tablets had been stored in this room in Hittite times, so that apparently we are dealing with a small deposit of texts apart from the known archives of Büyükkale (buildings A and E in FIGURE 1, E being MAKRIDİ's find of 1906).

A small test excavation was also made in some of the eastern storerooms of Temple I where MAKRIDİ

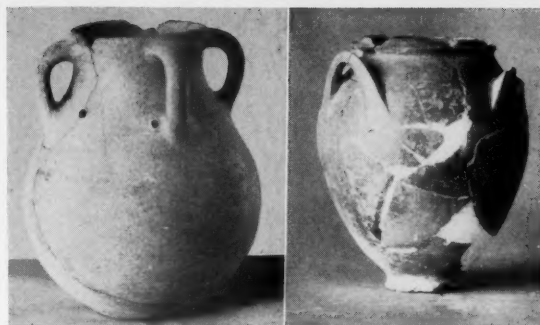


Fig. 8. Two cremation vessels. Left, urn of the Empire period with holes around neck and on bottom. Right, Old Hittite jar of a rather common type, burnished.

had found an archive in 1907. It only showed that MAKRIDİ had filled the greater part of these rooms with his excavation dump, and in the dump, both inside and outside the rooms, were found some fifty small and rather insignificant fragments of tablets.

There was a rumor that villagers had found tablets on Büyük Kaya, a large rock outside the city, on the other side of the eastern stream. The top of Büyük Kaya consists of two flat terraces, and on the larger and lower of these a trench was made. Four small fragments of texts were picked up on the surface, but in the trench there were neither tablets nor a building which could have housed them. After long digging we finally came upon bits of sloping pavement, covered with broken pottery and animal bones, and a corbeled passage the meaning of which we are not able to determine (FIGURE 5). This structure was most tantalizing, and it is foremost on the program of the 1953 campaign. It seems advisable to refrain, for the time being, from theorizing about this passage.

THE SPOT WHICH gave the most spectacular results in 1952 was found by chance. It was known that MAKRIDİ had found cremation burials on a rock outside the city, near the road to Yazilikaya. Although MAKRIDİ never published his find, BITTEL had identified the spot with the help of MAKRIDİ's old workmen. When we visited this place we saw potsherds with ashes under an overhanging part of another rock nearby (FIGURES 6 and 7). Excavation was started here immediately and carried down to a depth of 3.50 m., where bedrock was reached. In this small area—about 20 m. long and 3 m. wide, that is, just as far as the overhang of the rock reaches—fifty cremation and twenty inhumation burials were found (FIGURES 8 to 11). Originally, the number of burials must have

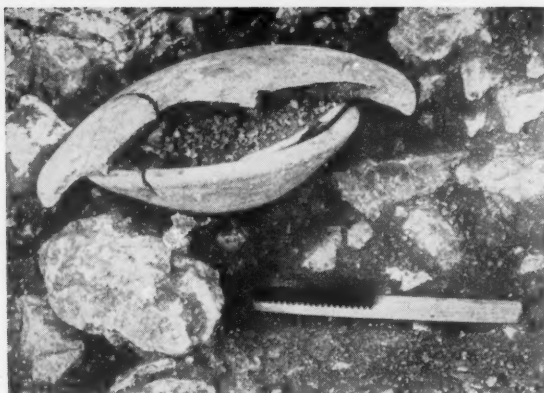


Fig. 9. Cremation burial with two bowls, one inside the other, both covered with a plate. Empire period.

been larger, since the frequent re-use of the place had caused many older burials to be pushed aside and destroyed. The length of time during which this burying place was used can be determined by the types of pottery. The oldest correspond to Kültepe *karum* I and Büyükkale IVC, which is the period after the Assyrian colonies; but BITTEL also mentions correspondence with Büyükkale IVd which would raise the beginning into the colony age itself (ca. nineteenth century). The latest vessels are of Empire type.

During all this time, cremation was practised along with inhumation, for both types of burials were present in all the layers. This shows, on the one hand, that cremation came into use in Anatolia much earlier than we had thought. On the other hand, the very fact that during the same period some people were burned and others were buried, and that both kinds of burials were deposited in the same place, presents problems for which we have no solution.

THE CREMATION BURIALS always consisted of ashes, mostly containing pieces of calcined bone, stored in clay vessels. Some of these were specially made as urns (FIGURE 8 left, Empire); others were vessels of everyday type which had been used for this purpose (FIGURE 9, Empire; FIGURE 8 right, Old Hittite). In the latter case, the lack of some minor parts (handle, spout, etc.) of otherwise complete vessels seemed to indicate that damaged pots had been intentionally chosen, if intact ones were not purposely mutilated.

Offerings were rare. Only two finds were made inside the urns: a stamp seal with "knob" handle and a small shell pendant. Both of these were in urns of the

Empire period. A few small vessels which contained no ashes seem to have been offerings too. Most noteworthy, however, were animal bones found with the burials. Although most burials were disturbed by the frequent re-use of the place, so that it was hard to ascribe any animal bones with certainty to an individual burial—cremation or inhumation—it seemed as though the animal deposits were connected with both types. In the meantime the bones have been studied, both those of animals and of humans. In order not to anticipate the specialists' report, we mention only that among the animal remains there are a few dogs, cattle and sheep or goats; but the majority are horses, that is, almost always severed heads of horses (FIGURE 10). Only one nearly complete horse was found in the deepest layer. Horse heads were present at all levels. The custom of killing a horse and burying its head together with a man lasted as long as the burial place was in use.

THE PAUCITY OF other offerings cannot be taken as an indication of poverty but must rather be explained by the beliefs of the people. In the Hittite ritual text describing the cremation rites for a king or queen of the Empire, mention is made of a place where heads of oxen and heads of horses had been burned at some stage of the ritual (the description of the performance itself is lost). In the accompanying prayer these animal heads are connected with the animals which were supposed to graze on the eternal pastures of the deceased ruler. This is, so far, the only hint at the possible meaning of our find. Other explanations, such as linking both cremation and horse burials to the feudal structure of the Hittite state or even to the Indo-European language of the people—first recognizable in proper names of the Assyrian colony age—are easily suggested but are hard to prove.

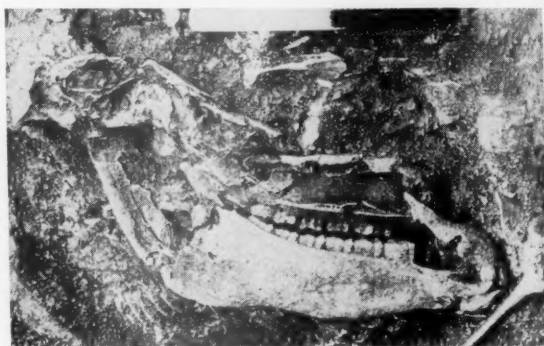


Fig. 10. A severed horse head found with burials.

Further Discoveries in Pine Lawn Valley

By Paul S. Martin

Another season (four months) of excavation in Pine Lawn Valley, New Mexico, has been conducted under the direction of Paul S. Martin, Chief Curator, Department of Anthropology of the Chicago Natural History Museum. Dr. Martin and his colleague, Dr. John B. Rinaldo, were assisted by James Barter, E. D. Hester, Alan Lapiner, David Mabon and Joseph Shaw.

IN THE SPRING 1952 ISSUE OF *ARCHAEOLOGY* (pages 14-21), I described our operations in Pine Lawn Valley, located in western New Mexico, and outlined the major peaks of historical development of the Mogollon Indian culture. To review briefly, we found that the area was first occupied about 2500 B.C. by Indians who had been forced to leave southern Arizona because of progressive desiccation of that area. These people were described as food-gatherers because they depended for sustenance more on na-

tive plants, berries and roots than on hunting. At or about the year 1000 B.C., or possibly earlier, a "revolution" took place—the idea of *planting* crops (maize, beans, squash) was introduced to these Indians—and life undoubtedly took a turn for the better. A dependable food supply, leisure and an increased population made possible other cultural improvements and inventions. Later, about 300 B.C., the skills of pottery-making and building pit-houses were borrowed from progressive neighbors hundreds of miles to the south. As



Aerial view of site showing seven of the fourteen secular rooms excavated.



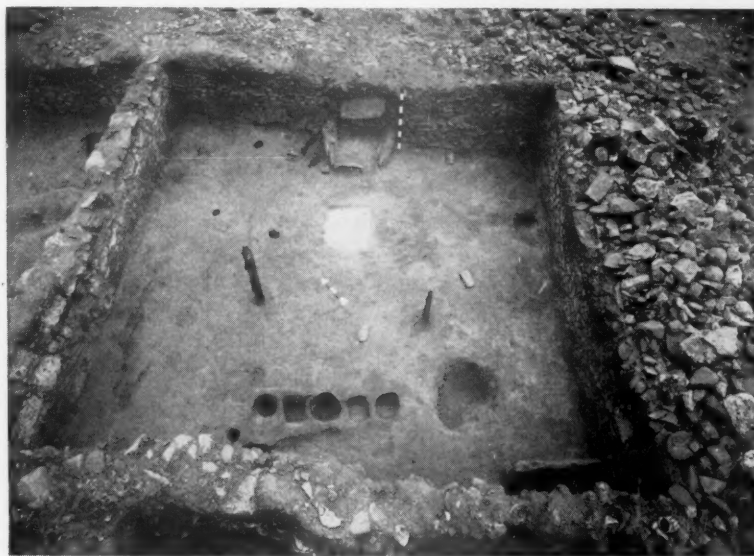
View of several of the secular rooms in various stages of excavation. Taken from 20-ft. tower.

time went on, marked advances in the arts, in architecture, in handicrafts and in domestic economy have been noted in our analyses. We assume also, from indirect evidence, that there was accompanying growth in spiritual matters.

During the season of 1953, we excavated part of an open site located on a hill overlooking the San Francisco River Valley. This pueblo had been built on top of the ground and was composed of about thirty con-

tiguous rooms, some of which had been two stories in height; of several "plazas"; and of one or two underground ceremonial rooms or kivas. We excavated fourteen secular rooms. We guess that this town was abandoned about A.D. 1250-1300.

In the preceding paragraph I noted that the pueblo was a "surface structure"—that is, the floors of the first story rooms were at ground level rather than below ground level, as in the case of pit-houses. The ex-



Room C. In the foreground are five corn meal receptacles and a storage pit; just above center, a firepit; and at top a platform or bin, the use of which is unknown. Meter stick in background; arrow points north.

Floor of dwelling room showing firepit, post-hole, mealing bins (far left), metate (far right), manos and broken pots.



terior masonry presented a plumb, attractive surface and was composed of well cut, rectangular stones laid in adobe mortar. The interior walls were not so carefully finished; but the lack of good workmanship apparently did not bother the occupants since they carefully plastered these interior surfaces. The living quarters were large (fifteen by twenty feet); sometimes two or three such rooms were grouped around a smaller room that may have served as a common pantry or storeroom for the group and was made handily accessible by openings or doorways from the living rooms to the storeroom.

The Mogollon pueblo was a well designed and well built structure. Many of the rooms in the inner block were provided with air conditioning! That is, a special masonry-lined duct, ten by twelve inches, brought fresh air from an outside intake under the floors of adjacent rooms and into the inner apartment at floor level. The flow of air was by gravity induced by the building of a fire in the inner room. The hot air rose and escaped through a ceiling opening, while cool fresh air flowed into the room. The volume of flow could be controlled by a stone or wooden slab that served as a valve. Ventilator systems for underground kivas or ceremonial rooms have been described many times in archaeological reports; but this may be the first example of a ventilating system for living quarters.

Pottery was varied, well made, and abundant. Over seventy-five whole or restorable vessels were uncovered (either on the floors of rooms or with burials)

and about 40,000 sherds were tabulated. The pottery consisted of two principal types: (1) textured, unpainted wares, the surfaces of which were decorated by indentations, corrugations, incising and the like; and (2) painted wares—with designs in black-on-white, in black-on-red and in black and white on red; and a third sub-type—a smudged or polished black ware.

Tools of bone and stone—awls, fleshers, chisels; axes, projectile points, scrapers, and problematical objects—showed an excellence of workmanship not present in previous centuries.

A group of five stone objects, found on the floor of a secular room, constituted one of the great "finds" of the summer. These objects—two animal effigies, a dish, a tubular tobacco pipe, and a disk, all made of stone and all gayly painted in colors of red, green, black and yellow—were probably used in sacred ceremonies concerned with healing the sick, bringing rain and snow, guaranteeing good crops, helping the hunter bag his game, and in protecting the village from any kind of danger. These objects are rarely found in abandoned houses—in fact, are rarely found. Just why these ceremonial paraphernalia were left behind constitutes a mystery; and even more puzzling is the fact that Indians wandering through the area in later times did not scoop up this loot. Is it perhaps because they were of indescribable sanctity and were so powerful that no one dared touch them?

We assume from a mass of indirect evidence that

Photos courtesy Chicago Natural History Museum

Sub-floor burial of adult with mortuary pottery. Arrow, 30 cm. long, points north.

the people who built and lived in this town had well developed ideas of cooperation, of love for the family and especially for the young, of life after death, and of family relationships and organizations.

Two great enigmas still face us. One is why the whole Pine Lawn Valley was abandoned. We have thought of drought, war and pestilence; but there is no evidence to support these guesses. And the other puzzle is where the people went to. They probably did not disappear from the face of the earth. We are inclined to think that some of them may have moved north to join what we now call the Zuni Indians, still residing near Gallup, New Mexico; and others may have moved several hundred miles westward. We hope to find answers to these problems and to the larger one of what causes cultures to wax and wane.



Cache of ceremonial objects of stone: two animal effigies, tobacco (tubular) pipe, stone dish, and disk. The painted decoration on the disk is well preserved, on other objects is obscured by lime coating.





Fig. 1. The north shore of Grand Congloué Island, a few miles off Marseilles.

From a year abroad, during which he held a Guggenheim Fellowship for the preparation of "A History of Maritime Commerce in Hellenistic and Roman Times," Lionel Casson brought home this account of underwater research now going on off the south coast of France. His interest in the sea began in childhood, was fostered during war service in the U.S. Navy, and still continues unabated. He has written articles on the sea or sailing for various learned journals, holds a Ph.D. degree (1939) from New York University, and is Associate Professor of Classics at that institution.

SEA-DIGGING

By Lionel S. Casson

THERE'S A VERITABLE CHAIN OF ANCIENT WRECKS ALL ALONG this coast. Practically every day a new one turns up." We were in the Archaeological Museum of Marseilles and the speaker was FERNAND BENOIT, its Director. The coast he was referring to was that of Provence which in the last few years has become the scene of an absorbing new branch of archaeology (see CHART, Centerfold). In his double capacity as museum director and Director of Antiquities for Provence and Corsica, M. BENOIT is involved with a dig like none other in the world. His workmen are no hired laborers but highly trained divers, the excavating is done many meters below the purple-blue surface of the Mediterranean, and the site is no city or necropolis but the bones of an ancient Roman wreck. To the romance and mystery of archaeology is added the traditional romance of the sea and the murky mystery of its depths. As one of M. BENOIT's assistants, Mme. GILL FAURÉ, who is an accomplished amateur diver, told me, "It makes earth-digging prosaic by comparison."

The sea has long yielded archaeological treasures, but excavation of an underwater site goes back only to the early years of this century. A ship which was carry-



Fig. 2. (Right, above) The diving platform at Grand Congloué. A diver is being readied for a plunge. Note the rubber suit worn for protection against the cold.

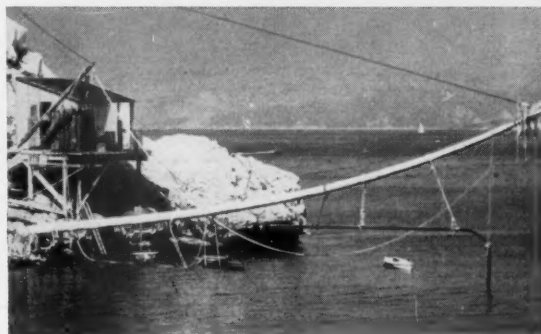


Fig. 3. (Right) The installation at Grand Congloué. The ropes carry the pannier used to haul heavy finds from the bottom. The black tube is the suction pipe.



Fig. 4. Mme. Fauré, one of M. Benoit's assistants, holds a piece of the curved rib of the vessel. The lower part was mortised to the keel.

ing a load of marble architectural pieces and statuary from Athens to some unknown destination in the first century B.C. came to grief off the coast of Tunisia near the modern village of Mahdia. There it lay for over two thousand years until it was discovered by local divers in June 1907. M. ALFRED MERLIN, then Director of Antiquities for the region, became interested, collected some funds and managed to get the French Navy to lend a hand by supplying a salvage ship from time to time. Between 1907 and 1913 enough was recovered from this wreck to fill half a dozen rooms of the Tunis museum. It was hard work,

a fight against wind and weather and time, and the resources of the French Navy were required for its success. Nothing similar was attempted until almost four decades later. The fishermen of Albenga, a town on the Italian Riviera, had known since 1925 of the presence of a wreck off their shores. The enthusiastic Director of Antiquities of the area, NINO LAMBOGLIA, persuaded Commandante QUAGLIA, Italy's spectacularly successful salvage expert, to try his hand at it. In February 1950 he put one of his famous salvage ships, the *Artiglio II*, at the disposal of archaeology and in twelve days divers managed to bring up over 700 complete amphorae and some scraps of the hull and its fittings. Those few days were all the ship could be spared for; thousands of jars still lie unrecovered.

OBVIOUSLY THERE WAS no future for sea-digging such as took place at Mahdia and Albenga. It required far too much equipment and money. Salvage ships had to mark time over the wreck. Large trained crews were needed to tend the divers, the air pumps and hoses, the complicated gear. Something was needed which would free underwater archaeology from depending upon the philanthropy of a navy or large salvage companies. Thanks to a French naval officer, Commandant JACQUES-YVES COUSTEAU, whose pioneer role in sea-digging is comparable to SCHLIEMANN'S in excavation, a way was found (see review of COUSTEAU'S book, *The Silent World*, in *ARCHAEOLOGY* 6 [1953] 126). An apparatus for free diving, one that did away with the need for pumps

Fig. 5. Campanian pottery from the wreck, arranged by size and shape, on the shelves of a museum workroom. Before being stowed aboard, the pottery had been gathered into small clusters like the one shown at the right.



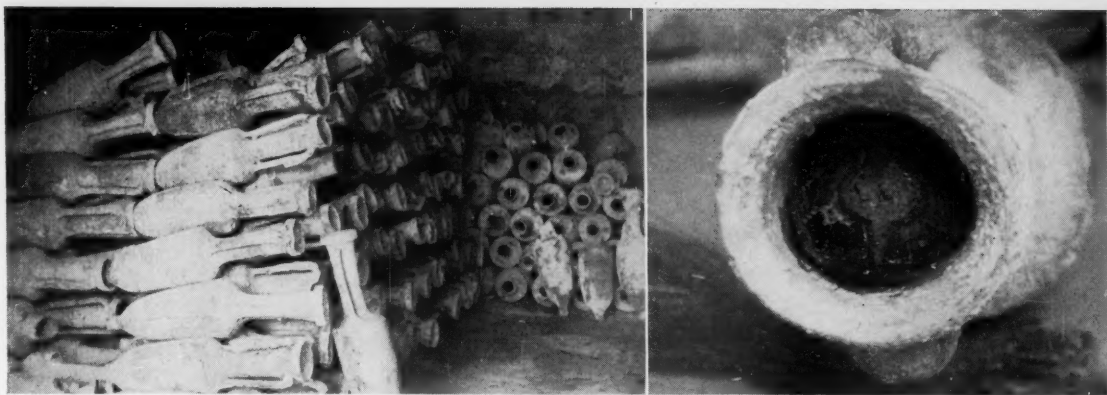


Fig. 6. Italic-type jars from the deck load in one of the museum's sheds. Right, an Italic-type jar with stopper and seal in place.

and crews, expensive diving suits and helmets, had been known in one form or another since as early as the 1860's. In 1943 the Commandant perfected a simplified form, now known as the Cousteau-Gagnon apparatus, which transformed diving from an esoteric technical field into one that could be indulged in by amateurs. It consisted of one to three bottles of compressed air connected with a mouthpiece and fitted into a harness which the diver carried on his back. The outfit was completed by a huge goggle fitting over eyes and nose and a pair of rubber fins slipped over the feet to aid propulsion, two items that can be bought in any sporting-goods shop.

ALMOST OVERNIGHT hundreds of French have become enthusiastic amateur divers. They have formed an organization known as the *Club Alpin Sous-Marin* whose individual members are constantly fishing up parts of anchors, amphorae, and other evidences of hitherto unknown wrecks. At times the membership as a body has lent its aid to underwater archaeology. In 1950, for example, the Club conducted a complete underwater reconnaissance of a pile of gigantic marble drums and column bases from a vessel that had met its end off the modern town of Saint-Tropez some time in the second century of our era. Two years later the members managed to secure the services of one of the most powerful floating cranes in France, and the huge pieces were successfully raised and piled on shore. The Club has made over seven thousand dives in the vicinity of Cannes alone.

One can no more excavate any wreck chosen at ran-

dom than one can any site on land. Just as in the latter case one must confine oneself to places where water, labor supply, etc., are available, so too there are limiting factors with a sea-site. It cannot be too deep; when much over forty meters the water is too cold and the divers waste too much time getting down. It cannot be too shallow or too far inshore either: souvenir-hunting amateur divers quickly plundered a wreck that was found only thirty or forty meters off the coast of Antheor (see CHART) at a depth of twenty-one meters. Nor can it be too far away from a port because then too much time is spent in getting the divers there and back, and the alternative, a ship large enough to anchor off the site and serve as floating base, is too expensive. In 1952 a wreck which fulfilled most of the requirements and promised things of great interest was

Fig. 7. Shipper's stamp on the lid of an Italic-type jar: SES and a trident.





COTE DE PROVENCE

CARTE DES EPAVES, AMPHORES, ANCRER, MARCHES, ETC... REPECHES
SUR LE LITTORAL, DES SAINTES-MARIES-DE-LA-MER AU CAP MARTIN.

Chart prepared by M. Benoit showing the location of all wrecks and under-water finds discovered along the coast of Provence. Drawn by L. Ducaruge.

reported and, as a result of a fortunate chain of circumstances, the first scientific attempt at sea-digging was begun.

A few miles outside Marseilles harbor lies a cluster of tiny islands which are no more than barren chunks of rock. Off one of these, the Grand Congloué, a fisherman had spotted in 1949 a group of amphorae lying on the sea floor. The word subsequently reached Com-

mandant COUSTEAU and a daring idea entered his mind. Just as SCHLIEMANN dreamed of discovering Homer's Troy, COUSTEAU burned with the thought of cleaning out the cargo of this wreck and raising the hulk from the sands to give the world its first glimpse of an ancient ship. Perhaps it would even be possible to build a replica and sail it over the route, this time successfully. . . . He had at his disposal the Navy



ECHELLE : 1/400.000

ship *Calypso*, which was fully fitted for underwater work, and funds were secured from the National Ministry of Education and from other sources. The first dives took place on August 16, 1952, and the work has continued ever since. The *Calypso* could not be tied up indefinitely, so since the wreck lay close enough to the island the Commandant returned the ship to the Navy in September and set up living quarters and diving installations on the island itself.

On the north face of the island, where the wreck lies, the rock drops sheer to the water (FIGURE 1). On the

slope is a hut which counts among its amenities a bottled gas stove and a gasoline refrigerator. Here the divers live. Twice a week a boat of the Marseilles harbor police brings them water and provisions. Far down the rock face and approached by steep ladders is the diving platform. On it is a little shed where the divers keep their equipment and where they dress (FIGURE 2). Projecting from here to a point over the wreck is a long boom that serves a double purpose. It forms part of a derrick carrying a cable that ends in a large pannier which is dropped down to the wreck to haul

up what the divers find. The boom also carries a large flexible pipe which acts as a vacuum cleaner (FIGURE 3). The intake lies by the wreck and the outlet is led to a point on the island. By playing the intake over a given part of the wreck, the divers can not only clean off some of the slime and algae that cover everything but suck up all sorts of fragments and small finds as well. In April 1953 even underwater television was tried; sitting high and dry on the island one could watch the divers at work.

At present there are two professional divers, one provided by the city of Marseilles, the other paid from funds that Commandant COUSTEAU has managed to scrape up. In addition, amateur divers often help out. The work proceeds at a snail's pace. The men are permitted to make but two dives a day, each lasting no more than twenty minutes. Since the wreck lies at a depth of forty-five meters the water is cold and the divers must wear what the French call "Tarzans," skin-tight rubber jackets and breeches (FIGURE 2). They dress on the platform and



Fig. 8. M. Benoit and an assistant examine one of the Italic jars.

lower themselves into the water. It takes about three minutes to swim down to the wreck. A timekeeper on shore allows the diver seventeen minutes under water, then shoots off a gun as a signal to surface. The diver has actually had no more than fourteen minutes of working time. When the weather is bad—and during the winter there are many such days—all dives are cancelled.

Over the passage of the centuries huge boulders had broken off the rock slope and crashed down on the wreck. All these had to be removed before real work could start. When it did, the divers quickly brought up the disappointing news that the hull could never be raised. The

ship had not settled into soft sand but had struck the rock, staving in the hull at the point of contact. Moreover, it had settled with a heavy list and the cargo, rolling downward, had ripped through and carried away the whole lower side. This, incidentally, has deprived us of knowing the width of the ship. Its length

seems to have been in the neighborhood of twenty-eight to thirty-two meters, which would make it somewhat smaller than the Mahdia and Albenga wrecks (approximately forty meters).

Once the boulders had been cleared the divers set about driving a hole from the deck through the hold right down to the keel. They discovered that the vessel had been loaded to the gunwales. The hold was filled with wine jars of the Greek type, lying on their sides. Scattered among these were pieces of Campanian pottery, which originally may have been stored in one place and simply spilled among the amphorae

Fig. 9. Amphorae of the Greek type in a museum shed.



when the vessel struck. And lastly there was a heavy deck load of wine jars of the Italic type carried in upright position. To make sure they had reached bottom, the divers brought up a piece of the keel and a piece from the thick part of a curved rib where it meets the keel (FIGURE 4).

The part of the cargo of most immediate interest to M. BENOIT was the pottery, for this enabled him to assign a date (FIGURE 5). It is of the type called Campanian since it appears to stem from the region about Naples known as Campania. Though some of the pottery shapes and stamps that came from the wreck are not familiar, most of them are and they point to a date about the end of the third century B.C. or the beginning of the second. The wreck is thus by far the earliest of its type so far discovered, for those at Mahdia and Albenga and almost all those found along the Provence coast are of the first century B.C. while the few exceptions belong to still later periods.

THE DECK LOAD consisted of wine amphorae of the Italic type, the long-necked, long-handled jars that turn up all the time in first-century B.C. wrecks along the coast of Provence (FIGURE 6). That so many wine cargoes of this century should turn up in this area is not surprising, for this was the period when Italy was exporting large quantities of wine to Gaul. A century or so later, Gaul had established its own wine industry. The fabric of these amphorae, according to M. BENOIT, shows traces of volcanic sand and thus supplies a second connection with the Naples area. Some of the jars bear along the lip the abbreviated names of their shippers, such as DAV or SES. Of these, only one, namely SES followed by a trident or an anchor (FIGURE 7), was previously known. SES followed by a star is known from Cosa, on the Tyrrhenian coast north of Rome, and the excavators at that site have assigned such jars to the first century B.C. In view of the date

convincingly set by the pottery in the wreck, it seems clear that the SES jars of the wreck must refer to a different, earlier shipper. One such amphora, incidentally, was found years ago at Brégançon near Hyères; presumably it came from another contemporary wreck. Who is this SES? Perhaps, answers M. BENOIT, he is the Marcus Sestius who we know from an inscription came from Fregellae, midway between Rome and Naples, and who was on Delos in 190 B.C.

These amphorae of the deck load were closed with a stopper of cork over which was placed a seal of plaster, set in wax (FIGURE 6). Some of the stoppers are still in place and the jars filled with liquid. Newspaper reports have announced that this must be the original contents, that is, wine over two thousand years old,

but M. BENOIT and his assistants smile at such assertions. As a matter of fact, a conclusive experiment was made while I was looking on. We took one of the jars that was still full and turned it on its side. The stopper was no longer perfectly sealed and a trickle of liquid came out. We tasted and the reactions—"eau de mer!" "salt water!"—rang out in unison.

Below the deck, in the hold, was a load of tubby wine jars of the Greek type (FIGURE 9). Most are of standard size but one or two of a smaller variety have also been found. All are unmarked. Curiously enough,



Fig. 10. Two sizes of Rhodian amphorae.

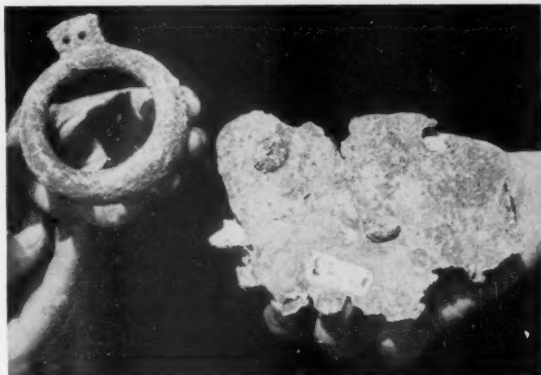


Fig. 11. Left, a lead ring, perhaps a sail-fitting. Right, a crumpled piece of sheet lead. The underwater part of the hull of the ship was sheathed with such lead sheets.

no stoppers have been found in these. In addition, a handful of Rhodian jars turned up, some of standard size, some smaller, and a few fragments (FIGURE 10). Unfortunately, all the markings are illegible. The Rhodian jars, being so few, can hardly have been part of the cargo; perhaps they come from the ship's galley. This is probably also true of some fragments of Megarian bowls that have been found; since the original port of departure, where the Greek jars were loaded into the hold, was somewhere in the Greek east, we would expect to find galley equipment of Greek manufacture. Miscellaneous pieces of wood and some lead ship-fittings (FIGURE 11) complete the list of what has been hauled up.

Let us now assemble our information and see what we have. We are dealing with a cargo ship somewhat over thirty meters in length, a size that seems to have been standard in these waters. Below the waterline its hull was sheathed with lead plates, just as sailing ships of later ages were covered with copper. Some time around the turn of the third to the second century B.C., it picked up a load of wine in the east Mediterranean, perhaps at a port on the west coast of Asia Minor, possibly at Delos or in Greece. This was stowed away in the hold. The ship then made its way to the Naples area, where it added a load of pottery and Italian wine, the latter lashed on deck. Setting forth for Marseilles, it went down just before reaching the port. There is no question but that the heavy, clumsy cargo contributed to the disaster. Just possibly, part of the cargo space was under charter to Marcus Sestius, wealthy shipper of Delos.

THAT IS ALL we can say at present. In the meantime, the work goes on and perhaps at this moment the derrick is raising something that will clear up another bit of the mystery. Sea-digging is painfully slow work and there are months, or rather years of it ahead on the Grand Congloué wreck. Hundreds of amphorae have



Fig. 12. Courtyard of the museum at Marseilles. The entrance to the museum of maritime history is at the right.

been raised but thousands still lie in the shattered hull. And when the work is finished, a dozen other wrecks—including one practically next door at Ile Maire—beckon. Most of these will turn out to be carriers of wine or oil or stone: rows of amphorae or chunks of marble are the archaeological objects that most easily attract a diver's eye. It was, for example, the deck load of columns lying side by side that brought about the discovery of the Mahdia wreck, when a diver reported that he had seen a row of sunken cannon. As time goes on, with added experience divers may learn to recognize the presence of other types of wrecks, just as trained photo-interpreters pick out archaeological sites from the vast field of an aerial photograph.

Everything found in the ship has been deposited in the Archaeological Museum at Marseilles and its care, study, and interpretation have been entrusted to M. BENOIT. In a little room off one of the museum courts he has started a museum of maritime history. Here he has on display examples of the various types of amphorae and other finds that have been recovered from the numerous wrecks along the coast. During my visit to Marseilles, M. BENOIT very kindly explained the finds and gave me permission to photograph them. I have offered here but a few general remarks; the rest of the story must await the scientifically exact publication that he is preparing.

ON SPHINXES

By George M. A. Hanfmann

*Associate Professor of Fine Arts and Curator of Classical Art,
Fogg Museum, Harvard University*

THE TWO SPHINXES ILLUSTRATED BELOW ARE recent acquisitions of the Fogg Art Museum of Harvard University. The first (lower left) reclining sedately is clearly a lineal descendant of the famous Egyptian Sphinx of King Chephren, though, of course, the little bronze is only a couple of inches ($2\frac{3}{4}$) long against the great sphinx' 240 feet. The Fogg bronze is a work of a curious style, angular and geometric in the main parts of the body yet somewhat loosely modeled in such details as the features of the face. The bottom displays an oblong hollow partly filled with lead and presumably designed to house a peg that might have fastened the figurine to a piece of furniture or a box. This bronze was first shown to the public at the great exhibition of Greek art in the Burlington House, London, in 1946 and was then described as a Greek work from Sparta made about 700 B.C.

The date may well be right, but the sphinx is not Greek. It has neither the fiery expressiveness of late

Geometric Greek bronzes nor the eager alertness of the early Orientalizing products of Greece. The tawny surface recalls the color of bronzes found in Syria and Phoenicia and the vague formation of features would not contradict an attribution to that region. We may compare it to a piece of Syrian stone sculpture published here for the first time by G. F. SWIFT. This engaging sphinx from a Syro-Hittite palace at Tell Tayinaat (on page 231) shows a similar sphinx type rendered in a similar geometric style. If the Fogg bronze was found in Sparta, it was carried there by seafarers of the early seventh century, who were pioneering the resumption of trade between the Near East and Greece and who brought Syrian and Phoenician ivories to Sparta, Perachora and Samos as souvenirs of their voyages.

Although admired by later Greeks, the majestic recumbent type of the Egyptian sphinx did not have much appeal to Greek taste. Their real favorite was

Bronze sphinx from Syria (?). About 700 B.C.



Greek bronze sphinx. Around 500 B.C.

Photos courtesy Fogg Art Museum



the watchful sphinx crouching down on its haunches with the front legs upright and erect. This type figures on a very Oriental-looking bronze shield found in Crete, on that masterpiece of Protocorinthian vase-painting known as the "Chigi vase," and on a terracotta support of an incense burner found in a grave of the Athenian cemetery at the Kerameikos. These were early experiments before and around the middle of the seventh century. Some fifty years later the crouching sphinx was first adopted for the magnificent stone and marble monuments which the aristocratic families of Athens began to erect over their graves.

IT IS NOT CLEAR how the Greeks came to associate their folklore tales about the rapacious sphinx, who devastated the region of Thebes and put the famous riddle to Oedipus, with this art type of Near Eastern antecedents. Apparently there was some sort of belief that sphinxes carried off the dead to the lower world and with that mission accomplished took over the duty of protecting the grave. "O sphinx, dog of Hades, whom do you . . . watch over, sitting over the dead?" asks an archaic epitaph [P. FRIEDLAENDER and H. B. HOFFLEIT, *Epigrammata* (1948) no. 139 A]. This Greek poem curiously echoes the words spoken by an Egyptian sphinx: "I protect the chapel of thy tomb. I guard thy sepulchral chamber. I ward off the intruding stranger. I hurl thy foes to the ground. . . ." I. E. S. EDWARDS, from whose brilliant book, *The Pyramids of Egypt* (Pelican A 168), this quotation is drawn, points out that the sphinx was apparently regarded by the Egyptians as the sun-god in his capacity of sentinel over the dead and that the lion was similarly entrusted with guardianship of the gates to the underworld. The Egyptian inscription was probably written under the Saïte dynasty (663-525 B.C.), the same dynasty whose rulers first permitted the Greeks to settle in Egypt. It is remarkable that the first Greek stone and

marble lions and sphinxes take their stations over Greek sepulchers during the same period, which was also the time when Greek sculptors were learning the technique of stone sculpture from the Egyptians. Might not the acquaintance with Egyptian usage and belief have inspired the Greek sculptors in their choice of sphinxes and lions as permanent guardians of the graves? To be sure, this inspiration could concern only the practice of placing beasts of stone over the tomb, not the types in which such guardians were represented. We have seen that the art types for the sepulchral sphinx (and, for that matter, for the seated and recumbent lions) had been developed several generations earlier in Greek minor arts from models supplied by Syrians, Phoenicians and perhaps Assyrians.

THE SECOND LITTLE bronze of the Fogg Museum (page 229, lower right) is a Greek example of the crouching sphinx. Similar bronze sphinxes are often attached to the tops of archaic and classical Greek mirrors. It is difficult to explain how the same monster that guards the grave can be used as adornment of objects used by women in daily life. Perhaps it was felt that the sphinx had a general power to ward off evil and thus could protect a beautiful lady from the jealousy of an evil eye. However that may be, our little sphinx can be enjoyed even without the knowledge of its exact purpose and function. In its posture, which suggests an incipient springing action, and in its attentive half turn of the head, it breaks away from archaic frontality and declares itself a work of earliest classical art. The lean, somewhat dry forms recall the sculptures of the earlier (western) pediment of the Aegina temple. It is possible that we must envisage its maker as active in the ambient of the famous Aeginetan school of bronze sculptors. Despite the summary treatment of the body this little sphinx is a work of lively charm.

The Sphinx from Tell Tayinaat

THIS SPHINX WAS FOUND IN 1938 BY THE SYRIAN Expedition of the Oriental Institute, Chicago (Field No. T-808, Oriental Institute Museum No. A 27853; length 0.244m., width 0.183m., height 0.254m.). It was associated with the second or intermediate floor of Building I, which was a

palace of a Syro-Hittite prince [AMERICAN JOURNAL OF ARCHAEOLOGY 41 (1937) 8-13]. The date of its find-spot is provisionally considered to be not later than about 700 B.C., but since we have no direct information as to its original use or setting, it may be older than the level in which it was found.



Photos courtesy Oriental Institute

Basalt sphinx from the Syro-Hittite palace at Tell Tayinaat. Front, side and back views. Before 700 B.C.

The material is gray basalt of rough, porous texture. The under surface is flat. The figure broke in two at a point where there is a round cutting in the base (0.048m. across, 0.075m. deep). The forepaws of the sphinx are set out from the body at sides and front, and the toes are well distinguished. Eyes and nose were cut for inlays, of which only the right one remains. A curl of hair comes down low on each side, and a fillet binds the crown of the head and is knotted in the back.

The moderate size of the sphinx (in relation to the monumental scale of buildings at Tell Tayinaat), the flat base and the cutting for attachment combine to suggest a position in some architectural context. The turn of the head leads one to conjecture a place at the left-hand side of a doorway with a companion figure opposite.

—GUSTAVUS F. SWIFT, JR.

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Preview of ARCHAEOLOGY, Spring Issue:

Jericho, the World's Oldest Walled Town—the excavations of 1952 and 1953 reported by the Director, KATHLEEN M. KENYON;

A Peruvian Goldsmith's Grave—rich treasures from South America described by S. K. LOTHROP;

The Foundation and Birthday of Rome in Legend and History—the evidence of the coinage assembled by ALINE A. BOYCE;

Etowah, Ancient Cult Center in Georgia—one of North America's most important sites described by A. R. KELLY;

Builders and Craftsmen of Islamic Iran, by DONALD N. WILBER;

as well as other articles, reports on the Fifty-fifth General Meeting of the Archaeological Institute of America and on the Fourth Congress of Far Eastern Prehistory, other news items and book reviews.

SURKH KOTAL

A Late Hellenistic Temple in Bactria

By Daniel Schlumberger

Since 1922, when the Délégation Archéologique Française first began work in Afghanistan, excavations have been conducted at the monasteries of Hadda, at Bamiān and, with most notable results, at Begram. M. Schlumberger became Director of the Délégation in 1946. Since that time he has excavated at several sites, including Bactra, a Buddhist monastery near the Khyber pass, and an Islamic site. The 1953 campaign at Surkh Kotal has recently come to a successful close, with the discovery of a second temple having its altar still in place.

ALEXANDER THE GREAT'S MILITARY CONQUESTS (334-323 B.C.) did more than extend Greek culture around the eastern Mediterranean, turning Anatolia, the "Fertile Crescent" and Egypt into Greek countries. They carried Hellenism much farther, into the Iranian plateau (present-day Persia), and beyond it (see map, FIGURE 1) into the lowlands of the Oxus and Jaxartes (now Afghan and Russian Turkestan), the highlands of the Paropamisadae (now central and southern Afghanistan), and the lowlands of the Indus (now west Pakistan). After the conqueror's sudden death a part at least of these remote countries remained Greek, at first under the Seleucids, later (from about 250 B.C.) under independent princes. The capital was Bactra (now Balkh). About this Greek kingdom of Bactria, its conquest of Northwest India at the beginning of the second century B.C., its struggle against central Asian nomads and its final collapse (toward 135 B.C.), we know very little indeed; this great story is lost. To reconstruct it we have but the scraps of a vanished literary tradition, and the coinage of the Greek kings and of their Saka and Kushān successors. Only for a decidedly later period, starting about the middle of the first century A.D. in North-

west India, and probably much later in Bactria, do we begin to have abundant traces of Hellenism in these countries, but of a very different kind; it is Hellenism in the service of Buddhism.

When, more than a hundred years ago, remains of the so-called Greco-Buddhist art became known for the first time, they were recognized at once to be an offshoot of Classical art. In that vast group of monu-



Fig. 1. Map showing the countries between the Oxus and the Indus. Ancient place names bear asterisks. The dotted line shows the boundaries of modern Afghanistan. Areas 10,000 feet or more above sea level are dotted.

ments the architectural forms are mainly those of the Corinthian order; and sculpture reproduces Greek figures, Greek attitudes and compositions and Greek ornamental designs. Nevertheless the ruins are those of stupas and monasteries, not of temples; the bas-reliefs picture scenes of the Buddhist legend, not of Greek mythology: what we have is Buddhist piety conveying its thoughts with the help of Greek skill, documents of an Indian faith wearing a Hellenized garment. The position is about the same as in the Mediterranean of the fourth century after Christ, where we find Greco-Roman art in the service of Christianity, the forms being traditional and classical, while the themes and ideas are new and Christian. But there, in the Mediterranean, we can easily follow the development of Early Christian art out of its pagan predecessor; whereas here, in the lands between the Indus and the Oxus, the origins of Greco-Buddhist art remain shrouded in deep obscurity.

WHAT WAS HELLENISM like in these distant countries, before its conjunction with Buddhism? How, where and when did this conjunction take place? These are great questions we cannot yet answer. What makes them so difficult to solve is the

total lack of evidence in Bactria itself. Not only are the monuments of the Greek kings entirely lost (except for the coins) but also the monuments of their successors, the rulers during the transitional age between the collapse of Greek power, about 135 B.C., and the expansion of Buddhism across the Hindukush



Fig. 2. Two blocks bearing Greek letters, from Surkh Kotal. Note the unusual shape of the *epsilon* (on both) and the *nu* (second and fourth letters on the second block). Similar forms are found on some Kushân coins or seals.

Fig. 3. Surkh Kotal. The hill-top seen from the northwest when the excavation began. The rampart and the peribolos to the right, with the mound (the temple) in the center, just above a dump of rubbish from the dig.



into the plains of the Oxus, some three or four centuries later. In 1922 the French Delegation was founded with the avowed purpose of investigating the problem of the transmutation of Hellenism into Greco-Buddhism on the soil of Afghanistan. Since then many Buddhist remains have been brought to light by the French excavators [on the work of the French Delegation see *ARCHAEOLOGY* 2 (1949) 11-16], but neither on the site of Bactra itself nor elsewhere, until two years ago, had they ever succeeded in finding Greek monuments of non-Buddhist character.

In 1951 remains of that kind were at last found in Bactria. It must be pointed out immediately that one such discovery is in no way sufficient to solve the problem. It is nevertheless to be considered a first step towards a solution, and therefore may seem of importance.

THIS IS HOW it happened. During the autumn of 1951, a friend of mine, SARWAR NASHER KHAN, who lives in northern Afghanistan, informed me that several stones bearing Greek letters had just been unearthed in Bactria. Photographs he sent with his mes-



sage could leave no doubt as to that discovery (FIGURE 2). As soon as I could I went north. The inscribed blocks had appeared on the main road from Kâbul to Mazâr-i Sharîf, about ten miles beyond the modern town of Pul-i Khumrî, at the foot of a hill (called Surkh Kotal) shaped like a promontory projecting into the valley of the Kunduz-âb (FIGURES 3, 4). A new section of the road had been laid out (FIGURE 4, "nouvelle route") slightly encroaching upon a ruined structure at the bottom of the hill, and there the blocks had been brought to light. A glance at this structure showed that it belonged to a rampart of mud brick, resting on foundations of stone.

The outline of the rampart was still clearly visible. We followed it up: it encompassed most of the hill area, on the top of which we found a smaller enclosure with a square flat-topped mound (FIGURE 5) in its center. Some large stone fragments lay scattered about, including two Ionic column bases, and a mighty bas-relief, about seven feet high. In spite of its mutilated state this bas-relief did not seem to represent any of the familiar scenes of Buddhist iconography. The enclosure showed no traces of the rows of cells generally

Fig. 5. Surkh Kotal. The central mound (the temple) in the first days of excavation, showing the railway track and the surface of the mound divided into squares.

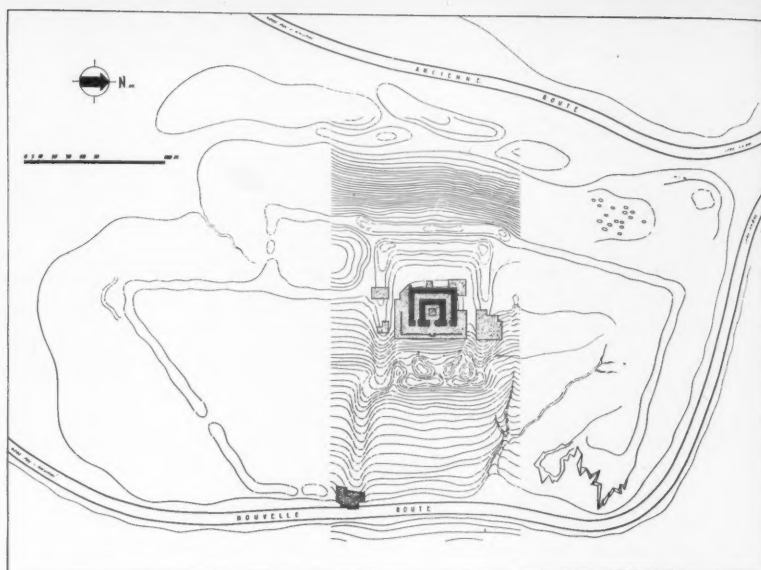


Fig. 4. Surkh Kotal. Sketch-plan of the hill, at the end of the first season of work (Spring 1952). The temple in the center; excavated areas in gray.

indicating Buddhist monasteries, and the mound did not look like a Buddhist stupa, the ruins of which generally assume a conical shape. We decided that the place should be excavated. (A preliminary report on the first season will be found in *Journal Asiatique* 1952.)

Work started at the beginning of April 1952 (FIGURE 6) and the nature of the ruin soon became obvious. It was a big sanctuary consisting of a temple (the "mound"), in the center of a courtyard, surrounded by a peribolos (the enclosure). At the end of May the temple had been cleared. It is built of mud bricks, reinforced with timber, and rests on a massive basement with a stone facing adorned with pilasters. This basement formed a large terrace (FIGURE 7) supporting a gallery which surrounded the temple. A wooden roof covered both the gallery and the temple itself. The temple consisted of a square room or cella, with a corridor on its north, west and south sides. On the east side lay the entrances to the cella and to both ends of the corridor. The walls of the cella were decorated with pilasters; its roof was supported by four columns: the stone bases of the columns and pilasters have been found in situ. The center of the cella was occupied by a large, square platform carefully built of beautiful ashlar masonry, with a flight of steps leading up to it on its western side (FIGURE 8).

Such was the plan of the temple during the first stage of its life. A second period was marked by some minor architectural changes. At the end of this period the temple was destroyed by fire. Of this fire we found abundant traces; in most places the mud bricks of the walls had

been, at least superficially, turned into baked bricks, and everywhere thick layers of ashes covered the ground, inside the temple as well as on the terrace. The history of the temple did not, however, end with this fire. While the terrace and the corridor remained in their state of destruction, the cella was restored. First the debris was flattened out at a level about five to six feet above the original ground, and the width of the room was reduced. Then a new roof was built, again resting on four columns, the bases of which we found in situ (FIGURE 9). After this period of mediocre survival the temple and site were deserted forever.



Fig. 6. The temple, from the north, being excavated. In the background are the snow-clad ridges of the central Hindukush.



Fig. 7. The south side of the temple being excavated. In the foreground the stone facing of the terrace with its pilasters; in the background, the temple wall.



Fig. 8. The interior of the temple cella (first period) from the southwest. The central platform, with its flight of steps, the four column bases and, in the background (right), the cella entrance and (left) the northern cella wall, with pilaster bases.

HOW WAS THE temple to be dated? During the first weeks of excavation this point remained rather uncertain. Then three bronze coins were found, at different places, but all within the debris from the big fire. In spite of their much corroded condition, they clearly belonged to the vast class of Kushân coins, and one of them could be identified: it was a coin of King Huvishka. I shall not enter here into the still hotly debated problem of the dates of the Great Kushân kings. The date of the accession of Kanishka, which should give the key for dating the whole dynasty, is, at present, sought for between A.D. 78 and 144. Roughly speaking, the first two periods of our temple would correspond with the second and early third century A.D.

The fire, then, could not have taken place earlier than the time of King Huvishka. Nor was it likely to have occurred much later. On the one hand close parallels appeared to exist between the letters on our blocks (several of them showing very peculiar shapes)

and on some of the Kushân coins or seals. (These similarities were first brought to my notice by Mr. A. D. H. BIVAR of the Ashmolean Museum, Oxford, whom I wish to thank for his assistance.) On the other hand the excavation unexpectedly yielded the statue of a man (FIGURES 10, 11) wearing the very costume we know to have been worn by the Parthian and Kushân princes, and showing, for instance, a striking similarity to a celebrated statue of King Kanishka from Mathurâ. Finally, among the pottery and other minor pieces collected within the rubbish from the great fire there was nothing one felt compelled to ascribe to a period later than that of the

Great Kushâns. Therefore there is little doubt that the sanctuary belongs to that period, and, as Huvishka appears to have been one of the later kings of that dynasty, one may even wonder whether the destruction of the temple is not to be connected with the conquest of the country by Shahpur I (241-272 A.D.), in which case its restoration and last period of life would date from the time of Sassanian supremacy.



Fig. 9. The interior of the temple cella, from the northeast, during excavation. The cella is in its third period, with four column bases resting on the debris from the fire that destroyed the temple at the end of the second period; in the foreground appear a column base and a corner of the central platform (first period).

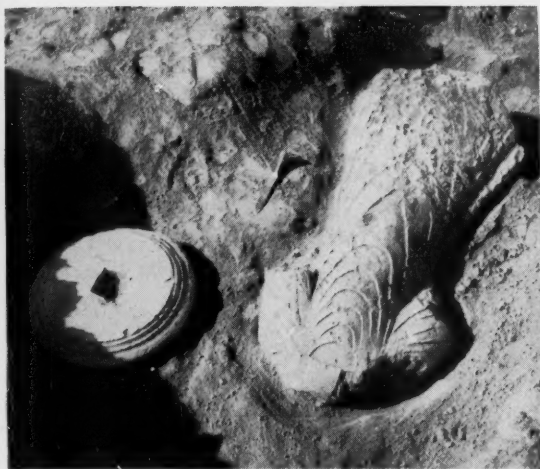


Fig. 10. The statue seen from the back, at the moment of its discovery at Surkh Kotal, lying as found in the excavation trench, with a column base nearby.

deprived of any means of identifying the divine owner of the place, and shall have to wait for excavation to yield new documents.

BUT ABOUT THE nature of the ceremonies something can be made out, or at least conjectured with a reasonable degree of likelihood. The rites must have taken place on the platform, the dimensions of which (4.65 meters square) would allow space for several priests. This platform appears to be but the pedestal for some important object now lost. And what, in an Iranian cult, could this object have been, if not a fire-altar? In his *Geography* (XV, 3, 15)

WHAT WE HAVE, then, it seems, is a temple, about three centuries later than the end of Greek rule in Bactria, a temple belonging to an age the greatest name of which is Kanishka, that patron of Buddhism in India, under whose reign Greco-Buddhist art was already flourishing in Gandhara. Nevertheless we feel justified in calling it a Hellenistic temple, for it appears a direct continuation of Hellenistic tradition, being either earlier than the great change brought about by the spread of Buddhism across the Hindukush, or at least unaffected by that change.

The temple at Surkh Kotal is purely Greco-Iranian, with no Indian admixture whatsoever. Most of the architectural ornament is Greek or derived from Greek models, for instance, all the moldings (FIGURES 7 to 9); but some of it is Iranian, for instance, a stepped battlement (FIGURE 12) showing a peculiar arrow-shaped ornament, for which many a parallel can be found in the Achaemenid and Parthian monuments. More important yet, the plan is typically Iranian, offering the closest analogy with that of a well known Achaemenid temple excavated by DIEULAFOY near Susa.

Now to what god did this temple belong? And what sort of rites were performed here? The Kushâns, as we see from their coins, worshipped a great number of divinities. Had the aforementioned bas-relief been in good condition, we might have been able to decide to which of all those gods or goddesses the sanctuary at Surkh Kotal was dedicated. As, however, this piece of sculpture was found hopelessly damaged, we are

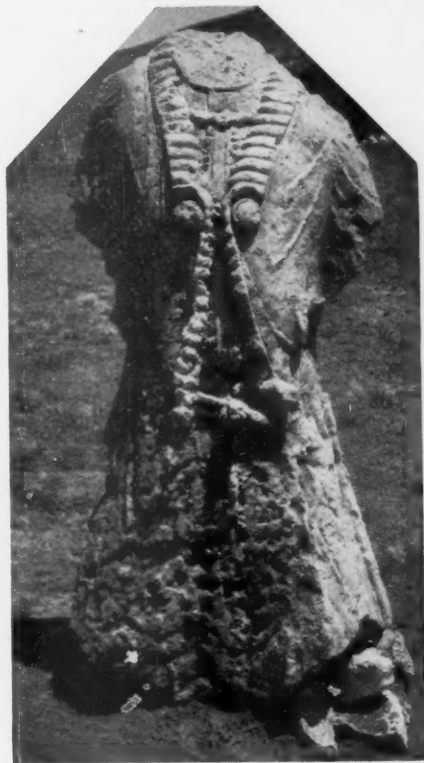


Fig. 11. Front view of the statue. The costume consists of a heavy coat worn over a tunic adorned with an embroidered front stripe. The coat is fur-trimmed, fastened on the breast by a brooch with two large knobs.

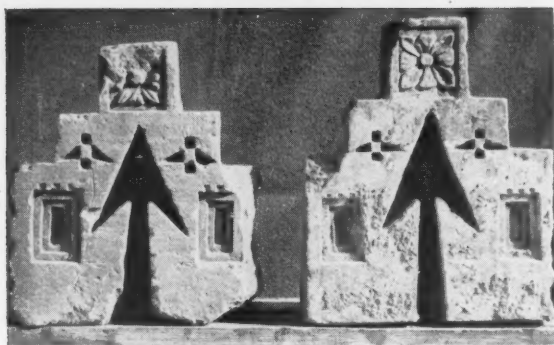


Fig. 12. Two stone slabs from a stepped battlement, the remains of which were found lying in and around the temple. Its original location has not yet been ascertained. It either crowned the temple or formed a balustrade around the platform. Note the false loophole shaped like an arrowhead: a typical Iranian ornament.

Strabo gives us a description of some Iranian temples of Cappadocia he had visited, the *pyraetheia*, as he calls them, where a perpetual flame was maintained by "magi." We believe the sanctuary at Surkh Kotal to have sheltered some cult of that kind. If this is so, what relationship did this cult have with Zoroastrianism, the classical religion of fire-worshippers that survives to this day in the Parsi communities of Persia and India? We cannot tell, but, in spite of the fact that the Oxus

region appears to have been Zoroaster's home, we do not feel at all sure that it included anything Zoroastrian. The great Iranian prophet is, of course, a figure much older than the Kushân kings, but classical Zoroastrianism, as we know it, is late Sassanian; it belongs to a much younger age. Surkh Kotal is more likely to increase our knowledge about the old cults of the Iranian lands, these "Daevayasnian" cults Zoroaster had fought or tried to reform, but which lived on for centuries after him.

The temple at Surkh Kotal has been laid free, but its courtyard, enclosed by the sacred precinct, remains practically untouched. Further campaigns are foreseen in order to excavate this large area, and work is soon to be resumed.

THE GOD BES

Little God Bes
Was a terrible fellow I guess,
Always shouting, "Look out chaps!
Civilization is about to collapse!"

In Alexandria, Cairo, Fayoum,
Civilization did not meet its doom;
But according to Professor Breasted
Bes did.

MORRIS BISHOP



The Corinth Museum Reorganized

By Charles H. Morgan

Charles H. Morgan, Professor of Fine Arts at Amherst College, has been both excavator and museum man, hence knows the tribulations of each. In the Spring of 1953 he managed to combine both activities, and while excavating at Corinth also undertook the rearrangement of the museum which houses the excavated objects. Here he tells us of the results of this work.

ALL MUSEUMS HAVE THEIR DIFFICULTIES, BUT the museum on an active excavation site has special problems, since there is rarely a permanent staff to give attention to the evaluation of new material and its assignment to exhibition or study space. At Corinth these are usually the duties of the excavator, whose primary responsibility is to the excavation itself rather than to the repository of the finds. His objectivity is also handicapped by the thrill of discovery, so that each new fragment yielded by the earth assumes at least a temporary importance in his eyes. He feels the world should see it, puts it on exhibition, but does not have the time for the long and speculative task of removing some other object from view.

Hence it is not surprising that the exhibits in the museum at Old Corinth had become somewhat confused and cluttered twenty years after their original installation. Mrs. WILLIAM H. MOORE, the donor of the original building, recently provided a generous addition for workrooms and storage, thus releasing more exhibition space, and provided funds for the reorganization which took place last spring.

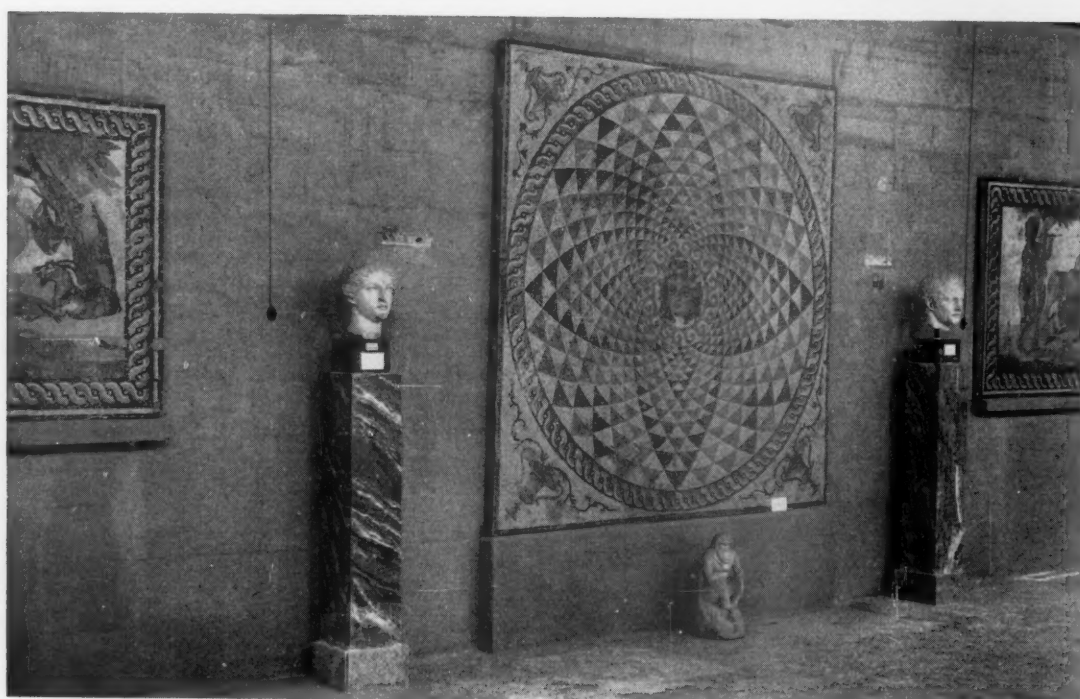
The first decision taken was not to increase the area open to the general public. It will never be possible to show everything that the specialist would like to see, and such material often surfeits the average visitor.

The Greek Room of the museum at Corinth, looking east from the doorway with the archaic sphinx in the foreground. The vases across the end wall are Corinthian of the late seventh and early sixth centuries B.C.

The original arrangement of the museum, allowing for two large and one small exhibition rooms, was retained. Finds of the past two decades had notably strengthened the collection and now made possible a well balanced chronological sequence. This entailed a major upheaval of the Sculpture Hall, demanded in any case by the need to accommodate the large Dionysos mosaic from the Roman villa and a colossal marble fragment of a seated goddess found at Isthmia in 1952.

The small exhibition room, to the left of the entrance of the museum, became the focal point for the pre-Classical periods, from neolithic pottery and figurines found near the Temple of Apollo through the rich finds of the Early Helladic period from Korakou (a settlement near Corinth), the contents of Middle Helladic graves in Corinth's North Cemetery, and the





The Hall of Roman and later art (opposite, above). In the foreground is a head of the Emperor Tiberius; at the center rear, the colossal statue from Isthmia.

The mosaics from the Roman Villa (opposite, below), the Dionysos mosaic in the center. Flanking it are two fine portrait heads found in the Theater at Corinth.

giant false-necked amphorae discovered in the potter's shop at Zygouries, a nearby settlement of the Mycenaean period.

CROSSING THE LOBBY toward the east, the visitor enters a long gallery devoted to the Greek period of the city. Immediately within the door is a group of objects from the Potters' Quarter to remind him of Corinth's importance as a manufacturing and export center, while a fine stone sphinx recalls the city's influence on archaic art.

In sequence around the walls pottery and figurines trace the ceramic history of Corinth from the Proto-Geometric period to 146 B.C., when the Romans sacked the city and left it desolate for a hundred years. The graves, the Potters' Quarter, temple deposits, wells, cisterns and rubbish heaps have all contributed to this series in which the visitor may follow the rise and decline of Corinth's great pottery style; the change in fashion toward Attic modes; the variations of design and ornamentation; the gradual evolution of pottery shapes and glazes.

A series of low cases in the center of the room contains objects relating to those on the walls or, as in the case of the lamps, showing the development of a single type. Here too are the finest objects in bronze, bone, ivory and gold. At the east end of these vitrines are monumental pieces of the sixth and early fifth century B.C., terra-cotta warriors from a small pediment, a polychrome terra-cotta sphinx, a bronze helmet, the stone figure of a girl, and a boy's sarcophagus, complete with its offerings of strigils and vases, from the North Cemetery.

RE-CROSSING THE VESTIBULE the visitor enters a large hall in which he may follow the changing fortunes of the city after its refounding by Julius Caesar in 44 B.C. The splendid figures of the Julio-Claudian family are followed by examples of Roman pottery, lamps and coins. Three mosaics from the Roman Villa occupy the center of the west wall. Colossal second-century figures contrast with smaller heads of exqui-



A work room in the new museum addition. On the tables are pottery fragments from the 1952 excavation at Lerna.

site workmanship. A small group of the third and fourth centuries leads to an unusual series of early Byzantine statues, then to mediaeval vases and coins. In the center of the room a large vitrine presents contrasts in the glass, ivory and metal work of Roman times and the Middle Ages.

An attractive feature of the Corinth Museum is its open court flanked on two sides by an arcade. Here the rearrangement consisted chiefly in grouping sculptures and inscriptions under the arcade and eliminating marbles that had accumulated in the open space. Certain important pieces were permanently installed, including a magnificent Byzantine carved lintel and the famous "Synagogue" inscription.

THE NON-PUBLIC rooms were allocated to groups of material not of prime exhibition quality, store-rooms for inventoried objects, and work rooms in which material can be spread on long tables for study and stored temporarily on shelves along the walls.

So long as excavation continues at Corinth the problem of selection for display will continue to plague the conscientious scholar. It is to be hoped that, in the immediate future at least, he will adhere to the basic chronological method of arrangement, exercise almost superhuman objectivity in evaluating the relative importance of his recent finds and, above all, never add anything to existing displays without removing its equivalent from view and consigning it to the storage shelves. Rather than overstuff the visitor it is better to offer him a balanced menu.



Photos City Art Museum, St. Louis

Terra-cotta statue of the goddess Diana. Front view showing restored bow. Back view on opposite page. Etruscan, about 470 B.C.

DIANA

By Perry T. Rathbone

Director, City Art Museum of St. Louis

THE ETRUSCAN DIANA pictured here is a new accession of the City Art Museum of St. Louis. The sculpture, fifty inches high, is modeled of terra cotta fired in one piece. Created by an unknown sculptor about 470 B.C., the Diana is one of the best of not more than seven examples of similar age, size and quality that have survived. Representing the virgin goddess of the moon and the chase, the youthful figure strides forward accompanied by a fawn leaping at her side. She is clad in a chiton, an ivory-colored undergarment, and a short himation or tunic of earth-red. Traces of a checkered border appear at the throat and the garments are edged with an earth-red border. The hair, also earth-red, is dressed in numerous curls and bound at the crown with an ivory-colored fillet striped with red. Simple button earrings adorn her ears. In her left hand the goddess carries a bow; with her right she gathers up the hems of her garments. Additional support for the statue is necessitated by the nature of the material. This is provided by an anthemion—an architectural ornament—over which the fawn is straddled. The holes in the anthemion and another in Diana's back served as vents for the escape of steam in the firing.

The Huntress

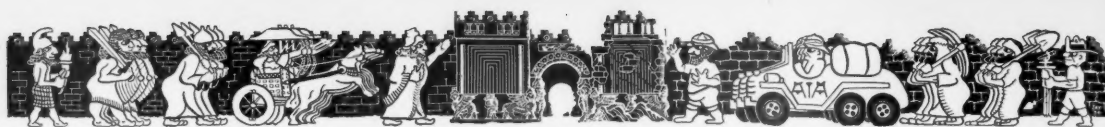
THE STATUE OF Diana is extraordinarily well preserved. However, she has suffered damage and some losses. She has been put together from one major and twenty minor pieces. Part of the left hind leg of the fawn has been restored; so have the bow and the first two toes of the left foot. A jagged hole in Diana's right shoulder has been filled in, and the left half of the base has been restored. The extremely subtle and artful operation of piecing Diana together, reinforcing the statue from inside and fashioning the removable restorations was carried out with the utmost care and ingenuity by Mr. JOSEPH TERNBACH of New York [compare his restoration of the Greek helmet, also in St. Louis, as described in *ARCHAEOLOGY* 5 (1952) 40-46]. It was Mr. TERNBACH who solved the riddle of the curious placement of the vent in Diana's back. He recognized it as also a slot for securing the goddess's quiver and made a hypothetical replica of this part of Diana's equipment.

IN MODERN TIMES the Diana first saw the light in 1872 when she was excavated near Civita Castellana in the territory of Falisco north of Rome. Her discoverer was Count FRANCESCO MANCINELLI-SCOTTI, a landed aristocrat and amateur archaeologist of considerable renown. His interest in his amazing discovery, however, did not extend to having his prize properly put together or even cleaned. Nor did he have the sculpture published or exhibited. In her original condition she was sold by the heirs of the Count many years ago to a Swiss collector. From him the sculpture was acquired for St. Louis.

The Diana dates from the most brilliant period of Etruscan art, a time when this pre-Roman culture was under the influence of Greek art and before it was overthrown by the military might of Rome. The "archaic" style of the drapery and the face is reminiscent of Greek sculpture of the early fifth century B.C., but the stocky proportions of the figure, and especially the vigorous movement, are purely Etruscan. Etruscan terra-cotta statues of the great period are rare. The

only other comparable examples in America are the two in the Metropolitan Museum. The remaining four are divided between the Louvre and the Villa Giulia Museum in Rome. Of them all the Diana is the only complete, single female figure that has survived, and the fawn is unique.





ARCHAEOLOGICAL NEWS

Obituaries

The noted archaeologist, Sir ELLIS H. MINNS, Professor Emeritus at Cambridge University, died June 15th. Perhaps the best known of his many works is the monumental *Scythians and Greeks*. He specialized in the study of classical archaeology in Russian lands.

Dr. LA RUE VAN HOOK, emeritus Jay Professor of Greek at Columbia University, died September 6th. He was the author of *Greek Life and Thought*, and other books and articles in the classical field.

Professor WENDELL C. BENNETT, Chairman of the Department of Anthropology at Yale University, died September 6th. His work in Mexican and in South American archaeology is well known.

Minoan Script Deciphered at Last

The most important archaeological event of 1953 is, without doubt, the successful decipherment of the Minoan Linear B script. Ever since inscribed tablets were first discovered in the ruins of the palace of Knossos, on the island of Crete, this writing has been one of archaeology's major puzzles. Lack of a bilingual inscription was the greatest barrier to decipherment, but although such an inscription has not yet turned up, the mystery has been solved by the use of modern cryptanalytic methods, and some of the inscriptions can now be read. To the surprise of some and the gratification of others, the language of these tablets has turned out to be Greek. Even the names of Greek gods and goddesses are found on some of them. The successful decipherer of this baffling script is MICHAEL VENTRIS—for an account of his brilliant accomplishment we quote from an article of R. D. BARNETT of the British Museum in the *Manchester Guardian*, September 30, 1953:

"In 1896 Sir ARTHUR EVANS was at-

tracted to the site of Knossos in Crete and soon began to excavate it, discovering a palace not unlike those found by SCHLIEMANN at Tiryns and Mycenae on the mainland and attributed by him to the Achaean Greeks of Homer's Iliad. But at Knossos EVANS believed he had found the palace of the pre-Greek kings of Crete, who bore the dynastic name of Minos, and ruled the first maritime empire of the ancient world. This empire apparently collapsed in 1400 B.C. when the palace was burnt, presumably by Achaean invaders from the mainland. In the palace EVANS found some 2000 documents inscribed on clay. . . .

"EVANS showed that there were three stages of writing in Crete. . . . The Linear B script [the latest of the three—Ed.] was the commonest and was in use at the time of the sack of Knossos. EVANS worked out its system for recording numbers and discovered that it used a system of pictograms to indicate classes of objects—e.g., axes, cups, chariots, swords, men, women. Soon it became apparent that these tablets were mainly inventories and accounts. An important development followed when this script was discovered to have been used in 'Achaean' sites on the mainland. But how were these tablets to be read? . . .

"In 1935 the British School of Archaeology at Athens celebrated its fiftieth anniversary with an exhibition at Burlington House. A schoolboy visitor from the classics form at Stowe, named MICHAEL VENTRIS, heard Sir ARTHUR EVANS describe how these tablets still defied decipherment. Accepting it as a challenge, he chose it as his hobby. After eighteen years it still is so, for he is now an architect. But meanwhile in his task he has succeeded, helped by two events. In 1939 Professor CARL BLEGEN began work at Pylos, the traditional home of Nestor, the aged counsellor of the Greeks before Troy. Here

he found . . . some six hundred tablets in the Linear B script. Yet though that script ceased in use at Knossos in 1400 B.C. here it was used till 1200 B.C. in a Mycenaean, i.e. early Greek milieu. These tablets were published in 1951. In 1952 Sir JOHN MYRES completed *Scripta Minoa*, Volume II, which EVANS had left unfinished at his death. In this were published all the Linear B tablets found at Knossos.

"A good supply of material, well classified, can go a long way in competent hands to make good the absence of a bilingual, by supplying variant spellings and opportunities for internal comparisons. Already by 1940 VENTRIS had found that Linear B contained some seventy common signs for sound values, apart from the ideograms mentioned above. Such a number indicated that it was a 'syllabary', each sign representing a consonant-plus-vowel, as a script with this number of signs can cover all the possible sounds of the human throat. . . . Invaluable work was done meanwhile by an American, ALICE KOBER, in recognising inflection and some endings. But in 1952 VENTRIS decided that the Linear B must conceal a form of Greek. This conclusion was not absolutely new; but his handling of it was. . . .

"The script which emerges proves singularly ill fitted for writing Greek, but this is probably because it was invented originally for writing not Greek but Minoan, and was taken over by the Achaeans for their language, just as the Semitic Babylonians took over for their language the Cuneiform script. . . .

"But in decipherments the real test is simple: does it make sense? And when an inventory of swords, recognisable as such by the accompanying pictogram, ends with a number and the 'total': *to-sa pa-ka-na* ('so many swords') for which the Classical Greek equivalent would be *tossa phasgana*, it is clear both that it is Greek and sense. Other

tablets contain the names of ancient Cretan cities. . . . Thus an early dialect of Greek has emerged, significantly like that of Homeric Greek. . . . Sometimes nothing can be made of the tablets at all, and perhaps then one may suspect that the tablet is written not in Greek but Minoan.

"Much more work on these tablets will now be needed. The work has only begun. But the most gratifying fact is that VENTRIS has at last rung up the iron curtain which for long cut Greek archaeology into two apparently disconnected halves—a Bronze Age, Mycenaean, but virtually pre-Greek, and a Greek Iron Age. They are now seen to be all one. In a year of British achievement which includes the scaling of Mount Everest it is good to be able to record a similar feat in the purely intellectual field for this was surely the Everest of Greek archaeology. And beside the names of other great and honoured pioneers of decipherment in this and other countries, CHAMPOLLION, RAWLINSON, SAYCE, GEORGE SMITH, we now add that of VENTRIS."

We are happy to announce that in an early issue of *ARCHAEOLOGY* Mr. VENTRIS will describe for us his method of deciphering Linear B as well as some of the results.

Cicada Whistles Again

In *ARCHAEOLOGY* 4 (1951), pages 243-245, Dr. NEIL M. JUDD of the Smithsonian Institution published three small clay whistles, made in the form of cicadas, which he felt sure were not the Indian artifacts they had been assumed to be, but merely modern commercial products.

Now Dr. DOUGLAS L. RIGHTS, president of the Wachovia Historical Society, Winston-Salem, N. C., comments in a note published in *The State* for August 22, 1953: "I am confident that in my travels through North Carolina I have seen one of these whistles in someone's collection of Indian material. . . .

"If any of the readers of *State Magazine* will produce one of these cicada (locust) whistles and explain the origin satisfactorily, I shall be glad to award the first informant a prize of \$10, and thus relieve the embarrassment of my friend Neil M. Judd."

We await results with interest.



Art of Islam

The Freer Gallery of Art in Washington, D.C., is featuring a special exhibition of Islamic art. A group of about thirty-five objects, only one of which has ever been shown before, has been selected from acquisitions of the past ten years for this new display.

The objects on view, including miniatures, calligraphy, ceramics, glass, metalwork, and jewelry, represent a chronological range of approximately one thousand years (from the seventh to the seventeenth centuries).

We reproduce here the earliest painting in the exhibition. It was painted in Baghdad in the year 1224, and it comes from an Arabic manuscript, a translation of a Greek work on plants. In their love for storytelling and extraordinary situations the Arabs were not satisfied to show plant after plant as in a textbook; they reproduced situations in which the plants discussed were used. In the miniature shown, one sees a man being bitten by a rabid dog. The emaciated body of the dog, with his tongue hanging out, portrays perfectly the diseased animal, and in spite of stylization the artist was able to express the surprise and horror on the faces of the victim and his friend.

New AIA Societies

The Central Illinois Society of the *ARCHAEOLOGICAL INSTITUTE OF AMERICA*, the third new local society to be organized in 1953, held its first meeting on April 22 and elected officers on May 27. There are thirty-three members en-

rolled. The officers are: President, Professor MATTHEW T. MCCLURE, University of Illinois; Vice-President, Professor JOHN L. HELLER; Secretary-Treasurer, Professor FRANCIS D. LAZENBY.

The fourth local group organized in 1953 is the Toledo Society, with forty-three members. The first meeting was held in October and the following officers were elected: President, Mrs. WARD M. CANADAY; Vice-President, Dr. C. UMHAU WOLF; Secretary-Treasurer, Dr. ROBERT KINSEY.

The Worcester Society is the fifth local society of the *ARCHAEOLOGICAL INSTITUTE* formed during 1953. Forty-two members attended the first meeting on November 13. The officers are: President, Mr. JOHN W. HIGGINS; Vice-President, Mr. GEORGE L. STOUT; Secretary, Dr. CONSTANTINE G. YAVIS; Recording Secretary, Mr. LINWOOD M. ERSKINE, JR.; Treasurer, Mr. RICHARD C. POTTER.

Eleusis and Mycenae—New Finds

During the summer of 1953 Professor GEORGE E. MYLONAS of Washington University directed excavations in Greece, both at Mycenae and at Eleusis.

In the Eleusis cemetery (see his previous report in *ARCHAEOLOGY* 5 [1952] 249) he uncovered fourteen burials of the Classical Period and twenty-three prehistoric graves. The most important Classical burial, dating from the fifth century B.C., was that of a woman whose cremated remains had been placed in a stone sarcophagus along with a bronze urn, five lekythoi and a

unique piece of cloth, perhaps a shawl, about two yards in length. Another interesting Classical grave was that of a child whose excellently preserved skeleton was found in a terra-cotta coffin (larnax). In the coffin were two small vases, a bronze strigil and some twenty knuckle bones. More knuckle bones and egg shells were found on the cover. The bones were used in a well known game and the shells were symbolic of regeneration and perhaps of immortality.

The most important of the prehistoric graves is a group of six found at the western end of the area, separated from the rest by well built walls. These graves apparently formed a historic landmark, and the evidence proved them to be the graves mentioned by Pausanias as belonging to those who, in the mythical era of Greece, fought against Thebes. According to Plutarch, these graves were pointed out to visitors at Eleusis as those of the leaders of that fated expedition. They are the graves Euripides had in mind when he was composing his *Suppliants*. In fact, one of them, which is set apart from the rest by a circular peribolos, corresponds to Euripides' conception of the grave of Capaneus. All six graves had been opened up and investigated in the Classical era. However, enough evidence survived to show that they belonged to different years of the prehistoric era and that consequently they cannot have been the actual graves of the legendary heroes.

Another interesting find was a Mycenaean grave of a new type, with a side approach and doorway. It contained the remains of at least eleven skeletons, twenty-five vases, two clay figurines of the Mycenaean Goddess, and a mold for casting gold rings.

At Mycenae, where Professor MYLONAS worked in the New Grave Circle, (see *ARCHAEOLOGY* 5 [1952] 194-200) in collaboration with Dr. JOHN PAPADEMETRIOU, of the Greek Archaeological Service, ten graves were investigated. Five of them are very large, averaging $11\frac{1}{2} \times 9$ feet. In only one of them, grave I, a single skeleton was found; each of the others contained at least two burials. Grave I yielded nine vases, a bronze sword with ivory pommel, a bronze knife, two gold cuffs and a gold belt ornament. Grave N contained three bronze swords, a bronze cup, two bronze daggers, a bronze

lance-head enveloped in cloth, a gold cup, a number of gold bands decorated in repoussé, a gold neck piece—a necklace or trimming of a garment—and at least thirteen vases. Grave M yielded twenty-one vases and grave O, among other objects, a unique bowl of rock crystal with a handle carved in the form of the head and neck of a duck. One of the smaller graves, grave Ξ , proved of special interest. Beside the skeleton of a small girl were found seven vases and around her skull a diadem of gold leaves which was secured by bronze and silver pins. A necklace of rock crystal beads, a gold ring and one gold earring made up the balance of the belongings of this little princess, as the excavators called her. All these graves date from the seventeenth century B.C.

Nimrud Dagħ

Last year Miss THERESA GOELL described for us the tumulus in the heart of Anatolia where Antiochus I, king of Commagene (69-34 B.C.) was buried (*ARCHAEOLOGY* 5 [1952] 136-144). Her two trips to this almost inaccessible spot, in 1947 and 1951, increased her interest in the tomb and her belief in the necessity of exploring it further. So, in the summer of 1953, she once more set out for Turkey, this time to undertake a survey of present conditions and future possibilities at the site. She is being accompanied by Dr. F. KARL DOERNER of the University of Munster, Germany, as epigraphist. We quote a few pages from her letters to Dr. CARL H. KRAELING, President of the American Schools of Oriental Research, the organization which is sponsoring the expedition. The circumstances of archaeological exploration have seldom been more rigorous than those described by Miss GOELL:

"Ankara, August 7, 1953. I had planned to meet Dr. DOERNER in Ankara and join forces for the final stages of the arduous journey to Nimrud Dagħ. . . . But because of my tarrying in Istanbul we met there by chance on July 30. Our meeting went off with a bang!!! While in a chemical house, investigating the possibilities of danger in transporting acetone from Istanbul to Nimrud Dagħ, in consequence of the extreme heat of the climate a row of bottles containing oxygen began to explode. One of them shooting in my direction was inter-

cepted by Dr. DOERNER, who is very tall, his head becoming the target instead of my face. Only his presence of mind and his application, himself, of first aid saved him from bleeding to death, as the artery over his left temple was severed. . . . I was able to get him to the German Hospital where he was operated on at once, the fragments of glass removed, and the wound stitched up. . . .

"Nimrud Dagħ, September 12, 1953. Dr. DOERNER and I finally arrived in Malatya on August 11. After several days we received our permit to remain in the country for three months. Then started the trip through the plain of Akça Dagħ to Gölbashi where there must have been a large caravan settlement in ancient days, now silted over in the marshes surrounding the lake. . . . Then Yeni Kâhta . . . to Eski Kâhta. . . . By the time we settled down on the roof-top of the old Muhtar of Eski Kâhta, the Bayram [a religious holiday—Ed.] had descended on us and all the countryside was paralyzed, including the "beast of the field." We therefore moved from the roof-top to a sheltered spot near a flowing spring at the base of Nimrud Dagħ and waited, meanwhile making preparations for workers and animals and provisions. We enjoyed a constant flow of visitors, and we were able to brush up on our Turkish. Dr. DOERNER had the situation well in hand, and if our tents were not being lifted up like aeroplanes every night by the wild tempests that blew down our valley, we could report that we spent a perfect week of negotiations—even with the thermometer in my tent topping the register at 112° . The mornings were beastly cold. . . .

"Arrived on Nimrud Dagħ August 24. I immediately began to work on the survey of the tomb and environs with an engineer and assistant, while Dr. DOERNER took over the work of constructing the camp and engaging the laborers. We are camping at the summer *yayla* or retreat of the shepherds of the vilayet of Pütürge. The shepherds have returned to their permanent villages and we have inherited their spring which is the nearest to the summit of the mountain, and also the host of unbidden hopping permanent residents of the *yayla*. The tomb is about an hour and a half away by animal, a stiff climb over needle-like outcrop-

pings of the mountain. We had to prepare the spring for use by us as it was the common drinking place of man and animal. Now there is a separate drinking place for the animals; the mosquito breeding marsh formed by the overflow of the spring has been canalized for their use. Other annexes, such as kitchen tent, etc., had to be constructed before the place became habitable, terraces for the tents and protective walls against the tempests that blow every evening, paths, and a shelter for the workers, who live too far away to go home every evening. We now have thirty workers as the cold and wind have set in and we are working against time. The shepherds tell us that "our luck is strong," but we have had our first rainstorm and we had all we could do to keep the camp from being wrecked, the only difference between it and a tempest at sea on a raft being that we had land under our feet. The storm passed without too great damage, and after several very cold days—the temperature suddenly went down to 41°—the sun is smiling warmly again.

"We have had a very fine few weeks of clearance of the tomb site. I believe that our results are good. We have been able to clear up a number of problems unsolved by HUMANN and PUCHSTEIN, one of the most important being the plan of the so-called "stepped altar" on the east side of the East Terrace. We have cleared its eastern supporting wall and have found a lion and eagle that surround it. We have also come to some conclusions regarding its asymmetry and its relationship to the colossal statues of the Gods, Antiochus, the lion and eagles from the west side of the court.

"One of the most important results of our examination has been the relationship of the north terrace to the complex of the tomb. Here we have found remnants of walls indicating long rooms like storerooms that were placed on the ridge and the slopes of the mountain top facing to the north. The former mysterious unadorned and uninscribed wall of the north terrace, if taken in relationship to these buildings, can be explained as being a part of the secular or non-ritual appurtenances of the tomb complex. This might belong to the living quarters and storage chambers of the priests and ritual slaves who tended to the feasts that were held at

the tomb. We also have found evidence of living quarters on the slopes below the tomb, and at a quarry at the base of the mountain the stone for the colossal statues. . . .

"We are now concentrating on the clearance of a passage behind the bases of the colossal statues of the East Terrace and we have been fortunate enough to find the missing head of Apollo nearly intact. . . . We now have these primary aims in view: (1) to clear the passage in order to lay bare the inscriptions of Antiochus. (2) To make latex copies, squeezes and photographs. (3) To find the retaining wall of the original tumulus which has poured down over the monument, obscuring the tumulus outlines and the architectural features. (4) To find the entrance to the tomb. Although we have cleared a considerable mass of rubble of the tumulus from behind the statues, that is, toward their west, we have not yet found a trace of it. This search, however, could only be continued at great risk if done without the aid of engineering equipment which is not at our disposal during this preliminary survey. . . ."



The Art of Oceania and Africa, as shown in the Museum of International Folk Art at Santa Fe. (Photo courtesy of the Museum.)

International Folk Art Museum

On September 5, 1953, the new Museum of International Folk Art was opened at Santa Fe, New Mexico.

The Museum was built to house the collection of Miss FLORENCE DIBELL BARTLETT, which was acquired in many years of travel. The collection, now augmented by other gifts, consists chiefly of costumes, textiles, household objects, and decorative items of folk origin.

Only a small portion of the Mu-

seum's contents is on exhibition; there will, in consequence, be periodic changes in the displays. There are, in addition, a library of folk art and ethnological literature, and rooms for research. The Museum also contains an auditorium for lectures, recitals, etc.

The most unusual feature of the Museum is its international character. Dr. ROBERT BRUCE INVERARITY, the Director, is planning a program of international cooperation designed to make the Museum a clearing house of folk art studies and activities. Publications, round-table discussions and conferences, eventual fellowships for foreign students and experts, will implement the policy.

Third Numismatic Seminar

Twelve students from six universities attended the American Numismatic Society's second Summer Seminar from June 23 to August 29, 1953. The use of numismatics as a necessary auxiliary to research in history and other fields of study provided the theme for the Seminar. Most of the conferences were concerned with specific problems in ancient and mediaeval his-

tory and art toward the solution of which numismatics makes a definite contribution. Those who conducted the conferences were Prof. ALFRED R. BELLINGER, Yale University; Prof. T. R. S. BROUGHTON, Bryn Mawr College; Prof. GLANVILLE DOWNEY, Dumbarton Oaks Research Library; JOACHIM GAEHDE, New York University; Prof. PHILIP GRIERSON, Cambridge University, England; Prof. HARALD INGHOIT, Yale University; Dr. GEORGE C. MILES, American Numismatic Society; Prof. E. BALDWIN SMITH, Princeton Univer-

sity; Prof. WILLIAM P. WALLACE, University of Toronto; Dr. LOUIS C. WEST, President of the American Numismatic Society.

A third Seminar will be held in the summer of 1954, and the Society will again offer grants-in-aid to students enrolled in universities in the United States and Canada who will have completed at least one year's graduate study by June 1954 in Classics, Archaeology, History, Economics, History of Art, Oriental Languages or other humanistic fields. Applications will be accepted also from students on the post-graduate level who now hold college instructorships in the same fields. Further information and application forms may be obtained from the office of the Society, Broadway between 155th and 156th Streets, New York 32, New York. Completed applications for the grants must be filed by March 1, 1954.

A Numismatic Half-Centenary

On February 22nd, 1904, King EDWARD VII "being desirous of encouraging a design so laudable and salutary," granted his Royal Charter to "members of a Society long since established for the study and elucidation of Numismatic Science." For at that date the Numismatic Society (later 'of London') was already sixty-eight years old and so was its journal, which had almost at once assumed the name which it still bears today, *The Numismatic Chronicle*.

This periodical records in articles, reviews and plates the constantly multiplying techniques by which numismatists seek to reveal the contributions of their science to political, economic and artistic history. The latest volume describes and illustrates coins of the Greeks, Romans, Libyans, Anglo-Saxons, Visigoths and Indians. Coin-like objects such as medallions are also discussed when occasion offers.

Plans are proceeding for a series of special publications comprising studies that are too long for inclusion in the *Chronicle*; and the first of these is in press. A beginning has been made, too, with the systematic presentation to British school libraries of selected books about coins. This has been made possible by means of funds left by the late Lieutenant WILLIAM MARSHALL.

The President of the Society is MICHAEL GRANT, Professor of Humanity

at Edinburgh University, and its Hon. Secretary is DR. JOHN WALKER, Keeper of Coins at the British Museum, London.

The Society particularly welcomes the rapidly mounting total of its American members. In 1904, out of 302 Fellows, 9 were from the United States and Canada; in 1953 a total of 327 includes no less than 63 from the same countries.

Athens Summer School

During the summer of 1954 the American School of Classical Studies at Athens will conduct a summer session in cooperation with the Bureau of University Travel. The course is open to graduates of American colleges and also to undergraduates who are interested in classical literature, history or art. About half the session, which will extend from June 25th to August 5th, is to be spent in Athens, where lectures will be given by the staff of the School and visits conducted to museums and ancient sites. The remainder of the period is used for trips to the main classical sites of Greece. The Director of the session will be Professor SAUL S. WEINBERG of the University of Missouri, who was associated with the American School for many years. Further information may be obtained by writing to Professor LOUIS E. LORD, Bureau of University Travel, 11 Boyd Street, Newton, Massachusetts.

It's a Small World

The strikingly similar ways in which man has met his basic needs, and the factors that are involved—environment, economics and culture—are the subject of "It's a Small World," an exhibition of ethnographic material which opened at the Newark Museum last September.

The story begins with the effect of natural environment on clothing and shelter. By means of life-sized figures, photographs and dioramas, comparisons are made graphically. Ethnographic material is shown from many regions of the world, including the South Pacific Islands, Africa, Australia, Alaska, the Americas, the Orient and Western Europe.

For purposes of explaining how men have studied men, a section is devoted to archaeology. A cross-section of an

archaeological site, hypothetically chosen from a northern Florida location, displays the type of material which might be excavated—charred food stuffs, hunting and fishing equipment, stone tools and weapons—the remains from which records of the past must be built.

The influence of cultural diffusion as evidenced in forms of ancient pottery is indicated by some of the oldest material exhibited—a ceramic bowl from an "Upper Grave" culture of Denmark dated ca. 1400 B.C., a Japanese ceramic bowl dated ca. 1000 B.C. and a jar found in Pennsylvania from an Old Iroquois culture dated ca. A.D. 1000. Varying in time, the three pieces are all of the same cultural level, the neolithic, and have certain similar features.

To illustrate how men have solved daily problems in similar ways, two simple items—the bowl and the spoon—are shown in separate displays. Spoons, scoops, ladles and a selection of ceramic and wooden bowls include examples of Greek, Roman, Chinese, Japanese, Colonial and contemporary American shown together with Oceanic and African. Additional displays include a collection of musical instruments, as well as a variety of religious and ceremonial objects.

The exhibition will continue through the spring and summer of 1954.

Earthquake Damage in Greece

It is reported in the Greek press (*Kathimerini*, September 11, 1953) that during the recent earthquakes in the Ionian Islands, considerable damage was done to antiquities in the two museums on the Island of Ithaca. Miss SYLVIA BENTON, of the British School of Archaeology, who has excavated for many years on the island, fortunately managed to save most of the material, with the help of the Ephor of Antiquities, V. KALLIPOLITIS.

The greatest damage was sustained by the museum at Vathy. Its north wall collapsed, destroying a case of vases from Miss BENTON's excavations at Aetos. The remaining antiquities were then packed in cases and transferred to a private home.

The museum at Stavros suffered only minor damage, but for safety the contents were packed and stored in the Stavros Public Library.



BRIEF NOTICES OF RECENT BOOKS

A Near Eastern People

The Hittites, by O. R. GURNEY. xvi, 240 pages, 19 figures, 32 plates. Penguin Books, Baltimore 1952 (Pelican Book A 259) \$0.85

Here, at last, is a good, clear, comprehensive, well written English book on the Hittites. Written by a scholar in full command of the sources, it represents the present state of knowledge of the history and civilization of the Hittites. After an introduction, "The Discovery of the Hittites," the material is arranged in nine chapters: Outline of History, State and Society, Life and Economy, Law and Institutions, Warfare, Languages and Races, Religion, Literature, and finally, Art. The bibliography offers a good selection of

works which underlie the author's views and which enable the reader to look deeper into the matter. Thirty-two excellent plates and nineteen drawings give as good a cross-section of the monuments as limited space permits.

Who are the Hittites and why is it worth while to have a book on them included in the popular Penguin series? For the average layman they are just a tribe mentioned in the Bible. What the discoveries of the monuments and especially the thousands of cuneiform texts in the royal Hittite archives have taught us, is quite different from the picture drawn from vague Biblical references. A special merit of GURNEY's book is that it brings out this difference quite clearly (pages 59-62).

The historical Hittites were a major

people of the ancient Near East and played an important role in the "Balance of Power" of the Amarna Age. Furthermore, their language, which belongs to the Indo-European family, was written down earlier than any other language of the group. Its decipherment has greatly stimulated Indo-European studies, especially in this country. The Hittites left monuments of a somewhat barbaric beauty which, although freely drawing from the repertoire of Near Eastern motifs, have a style of their own. But most important is that the Hittites of Asia Minor are a link between East and West, not only geographically but also culturally. Some elements in their civilization are indigenous Anatolian. The scribes of Hattusa, however, not only learned Babylonian

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The Church of St. Martin at Angers

By GEORGE H. FORSYTH, Jr. In this monograph on an outstanding monument of the 12th century Gothic style in France, Mr. Forsyth employs the stratigraphic methods of excavators of classical sites to record the extraordinarily rich and complex stratification of Angers, which represents 1200 years of architectural evolution. He presents this series of buildings which successively stood on the site of St. Martin's as an expression of the broad historical development which shaped them.

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Published for the University of Cincinnati.

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cuneiform script but also endeavored to acquire Babylonian "higher education": they copied and translated many kinds of Babylonian literature including some of the "encyclopedic" word lists and even addressed their own (Anatolian) gods in hymns modeled after Babylonian originals. On the other hand, their feudal state and society link them not only with their contemporaries, the Kassites of Babylonia, but also with the Homeric Greeks. The similarity between the ruins of Mycenae and Hattusa has struck many visitors. Between a Hittite and a Homeric chariot warrior there is not much difference and the similar ritual performed by both peoples for the cremation of their rulers is another link. So are the myths concerning the succession of the Ouranides. The controversial question as to whether there were direct contacts between Hittites and Akhians is treated in a special section (pages 46-58); the evidence is presented in detail and carefully discussed, and the reviewer fully agrees with the author that the answer will be in the affirmative. Here as elsewhere, the clear distinction between given data, obvious conclusions and probable hypotheses is one of the assets of GURNEY's book.

A "European" people, living in the Homeric Age in Asia Minor, superimposed upon an indigenous population, in contact with the East and speaking to us in their own language written in Babylonian characters: these are the Hittites. It is to be hoped that Dr. GURNEY's book will meet with the response that both the subject and the book deserve.

HANS G. GÜTERBOCK

Oriental Institute
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Prehistoric Peruvian Art

The Art of Ancient Peru, by HEINRICH UBBELOHDE-DOERING. 48 pages, 5 figures, 244 plates (4 in color), 1 map. Frederick A. Praeger, New York 1952 \$12.50

The same recipe for editing a book on ancient Peruvian art has been applied for the past thirty years, but no one has yet troubled to state the ingredients. With the appearance of a book of such superb technical quality as DOERING's *The Art of Ancient Peru*, which exemplifies the latest use of this time-honored recipe, it is time to un-

mask the secret. The magic formula (with one cup equal to about twenty illustrations) is this:

Main ingredients: Mochica ceramics (2½ cups)
South Coast textiles (2 cups)

Stir well.

Mix ¼ cup of Nazca ceramics and Coastal Tiahuanaco ceramics.

Slowly stir with ¼ cup of Pachacamac and Ancon textiles and an equal quantity of Cuzco architecture.

Crack one metallurgical egg (Lage Ica or Chimu goblets will do splendidly) into the mixture and beat.

Allow to burn over slow fire while adding one teaspoonful each of Highland (Inca, Tiahuanaco, Recuay) and Late Coastal (Chimu, Ica, Chancay) pottery.

Add dashes of Pucara, Nieveria and Chavin ceramics; coastal architecture (Chan Chan, Huaca del Sol); and miniature objects of wood, bone, stone and shell (llamitas, snuff tubes, staffs, etc.).

Serve with a sprig of the Sun Door at Tiahuanaco and the Raimondi stone (the Sillustani chullpa is a good substitute).

For those who prefer less condiments, the dose of Cuzco architecture may be doubled and the dashes of local ceramic styles reduced or eliminated.

To this reviewer DOERING's is one of the finest illustrated books on Peruvian prehistoric art yet to appear. Nonetheless, we plead from potential publisher and author alike a search for new and more satisfying formulas. The Peruvian artistic larder can stand quite a bit of culinary experimentation. More attention to murals, coastal and north and central highland architecture, lesser known ceramic styles, stone sculpture and previously unpublished examples of the better known art styles is urgently needed.

Aside from the 240 pages of photographs showing artifacts in the variety and proportion referred to in the above recipe, the book contains an introduction, a bibliography, a map and a section of long and fascinating interpretative captions for the plates.

The introduction corresponds to a running aesthetic commentary on the illustrations. Although DOERING follows the rough chronological order of the plates, beginning with Inca and

ending with Chavín, he confuses the reader with digressions into hypothetical stylistic affiliations before he has accomplished the primary obligation of providing a basic time and space perspective within which to orient the visual material. Particularly disturbing is the cavalier presentation of DOERING's rather startling theory that the Peruvian coast up to ca. A.D. 500 or later was little more than an immense burying ground for the highland cultures. Romantic and appealing as it may sound, this contention is contrary to the cumulative evidence for rather intensive settlement of the coast during this time presented by STRONG, WILLEY and CORBETT, *Archaeological Studies in Peru, 1941-1942* (1943); BIRD, "Pre-ceramic Cultures in Chicama and Viru" in *A Reappraisal of Peruvian Archaeology* (1948); FORD and WILLEY, *A Surface Survey of Viru Valley, Peru* (1949); BENNETT, *The Gallinazo Group* (1950). That such a theory is defensible on the basis of studies previous to those just cited is a reflection of the basic trend in Peruvian archaeology from about 1880 to 1934, which was the excavation of cemeteries to the virtual exclusion of everything else.

In other respects the introduction makes interesting reading. DOERING communicates a mixed feeling of enthusiasm, awe and fascination for the great art styles of precolonial Peru rarely encountered in archaeological literature. Among his more significant comments are 1) the curious and unexplained similarity between the well-modelled heads of Pacheco (Coastal Tiahuanaco) and Mochica ceramics, and 2) the Life-Death theme as a possible explanation for the contrasting modes of plastic expression in Classic Tiahuanaco art.

In the introduction and in the captions are important hints about DOERING's findings during his last two field trips to Peru which should be noted.

1) The find of an extinct water hog in the pampa de Mocan (north of the Chicama valley) in some sort of association with artifacts (page 17).

2) The renaming of the Nazca Y and/or Epigonal phase of the Nazca culture as the "Morro culture" on the basis of his excavations (as yet unpublished) in this area, because "the tombs yielding this kind of fabric are situated on the 'morros' . . . and because the term 'Epigonal' involves a de-

preciation that is not really justified" (page 35).

3) Four examples of Mochica pottery excavated at the Huaca Campana, Pampa de Jaguey, in the Chicama valley (plates 169-173, 200).

4) Textiles and pottery from his excavations at Pacatnamú, Jequetepeque valley (plates 226-7, 192, 234).

The bulk of the book consists of the photographs, which are generally excellent. A few pieces are reproduced here for the first time. Two minor errors should be noted on the map. Paramonga is wrongly placed on the Huarmey. The ruin is located in the Fortaleza valley. Nieveria should be indicated by a dot northeast of Lima, not where it appears in the position corresponding to the Chillón river.

Despite the cost, DOERING's volume is a must for art historians and highly desirable for archaeologists interested in prehistoric America. The scarcity of books dealing with prehistoric Peruvian art of the quality of DOERING's is sufficient evidence that *The Art of Ancient Peru* has made a timely appearance.

RICHARD SCHAEDEL

Yale University

Ancient Greece—Coinage

A Book of Greek Coins, by CHARLES SELTMAN. 31 pages, 48 plates, 1 map. Penguin Books, Baltimore 1952 \$0.95

Both Dr. SELTMAN and Penguin Books are to be complimented on this notably successful booklet which brings the finest of Greek coins to the attention of a wide circle of readers at most moderate cost. It is no mean achievement to take a subject as comprehensive as Greek coinage from its beginnings to the time of Alexander and present the material in a manner which is intelligible, informative and eminently interesting. This Dr. SELTMAN has done.

In its general plan and choice of illustrative matter, the present work follows the author's more elaborate *Masterpieces of Greek Coinage*. One hundred and seventeen coins are shown, more than twice as many as in the earlier publication, and although the plates are not of the same superb quality, they are nevertheless excellent. A map of the eastern Mediterranean world, included in the booklet, should be of great help in enabling the reader to trace the geographical relationship

of the various coinages discussed.

Since this work will undoubtedly reach many who will pursue the subject of Greek numismatics no farther, it is unfortunate that the dates given for the earliest coinages are the traditional ones which now must be revised drastically downward in the light of E. S. G. ROBINSON's study of the Artemision deposit at Ephesus (*Journal of Hellenic Studies*, 71 [1951], 156-157). One wishes, too, that in a book of this nature, Dr. SELTMAN had presented as possibilities rather than as certainties such controversial points as the association of Pythagoras with the incuse coinages of South Italy and the identification of the obverse head on the Alexander tetradrachms of Alexandria as that of Alexander himself.

MARGARET THOMPSON

American Numismatic Society

Mythology of the Near East

The Oldest Stories in the World, by THEODOR H. GASTER. x, 238 pages. Viking Press, New York 1952 \$5.00

This book, originally translated and retold with comments by the author, is a unique contribution to the study of

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ancient folklore, myth and religion. Until recently, our knowledge of the eastern Mediterranean was derived from the Bible and Classical records, whose concern was either religious, or at best indirectly, with Egypt, Palestine, Asia Minor and Mesopotamia. As a result, the rich background of the Greek heritage was but a hazy memory in the mind of the classical scholar. With the rediscovery of the ancient cities and the prehistoric sites, and the decipherment of their scripts and languages, we are enabled to penetrate into the heart of the very rich cultures which flourished in the Near East over four thousand years ago.

The Oldest Stories is a collection of thirteen stories gleaned from Babylonian, Hittite and Canaanite inscriptions, with comments and explanations following each narrative. It also contains a dozen pictures of ancient sculptures dating from the time these stories originated and flourished, illustrating the setting and the imagery underlying each myth. Most of these stories, some of them in a very fragmentary state of preservation, have been known to scholars and specialists for some time.

However, this material was not accessible to the layman and the common reader. This publication, therefore, opens the storehouse of pre-Biblical and pre-Homeric mythology and folklore to the non-specialist and the young boy or girl whose interest in man's career is aroused at an early age.

These fantastic and most fascinating stories are told in the simplest and most modern English style, and the reader remains unaware of the difficulties and the uncertainties the author experienced in putting these accounts into their present shape. It is in the comments following each story that an analysis of each story is presented, and the author tells how he was able to complete these accounts out of very fragmentary originals. He admits that to make each story a finished product he had to restore what was lost in the text from "hints, clues, parallels and often sheer intuition."

Dr. GASTER, a distinguished linguist and folklorist, is the author of many books and articles on Near Eastern culture. In this book he has achieved a high goal as an artist-narrator and an ingenious scholar. This pioneer work

should find a prominent place in every family library alongside the Greek and Hebrew classics.

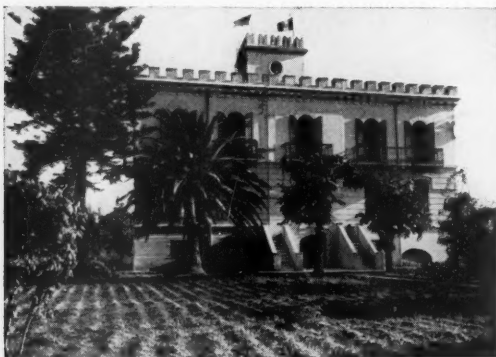
ISADORE KEYFITZ

*Bible College, at the
University of Missouri*

Egyptian Art in the Sudan

Decorated Chapels of the Meroitic Pyramids at Meroë and Barkal, by SUZANNE E. CHAPMAN with text by DOWS DUNHAM. vii, 5 pages, 34 plates. Museum of Fine Arts, Boston 1952 (The Royal Cemeteries of Kush, Vol. 3)

Through many centuries of Egypt's power, her pharaohs endeavored to establish commerce and eventually suzerainty in the southern reaches of the Nile, where riches such as gold, ivory, ebony and pelts were to be obtained. By the time the Egyptian empire faltered into collapse, the primitive peoples of the south had been exposed almost a millennium to the gradual infiltration of Egyptian culture. Thus was laid the foundation for the emergence of a Kushite dynasty, its rulers perhaps not originally of native stock, at Napata



Villa Vergiliana, Cumae

The Vergilian Society of America announces its summer program for 1954, centered at its Villa Vergiliana at Cumae, Italy, near Naples. Teachers and students of the Classics or ancient history will find its facilities and program of special interest and value. Lectures are given on the spot at Cumae, Pompeii, Herculaneum, Capri, Paestum, Baiae, Avernum, and the great Naples Museum by the Director and by leading Italian authorities—Professors Elia, Sestieri, Maiuri, Mustilli, De Franciscis. Delightful modern living accommodations at the Villa, and the importance and interest of the historic sites visited make the Vergilian Summer School a memorable experience. It affords unique opportunity for study of Roman life and art, and provides background of special inspirational quality for teachers. A certificate of the work done is issued.

1954 CLASSICAL SUMMER SCHOOL AT NAPLES AND CUMAE

The program for 1954 will consist of three sessions, each of two weeks duration: July 2-15, July 16-29, July 30-Aug. 12. Longer stays for further study are encouraged. It is allowed to begin late in the first or second session and stay on into the subsequent session to complete the cycle of trips.

This leaves the rest of one's summer free for travel elsewhere in Europe. Tuition (which includes transportation to the lecture sites) is \$60 per session. Board and room at the Villa amount to an additional \$3.50 a day. Application should be made early, to the Director.

Rev. Dr. Raymond V. Schoder, S.J., West Baden College, West Baden Springs, Ind.

around 750 B.C. This royal line intervened decisively in Egyptian politics, conquering the country and, as the Twenty-fifth Dynasty, maintaining checkered rule there until driven back by the Assyrians in 663 B.C. to its southern fastness. In the Sudan the Kushite kings, politically free from Egypt but almost totally dependent upon her culturally, ruled for centuries. The first Napatan dynasty was followed by a second (653-538 B.C.), and that by the long line of rulers holding sway at Meroë from 538 B.C. to about 350 A.D.

All the reliefs in this volume, the third in the series embodying the results of the Harvard University-Museum of Fine Arts Egyptian Expedition in the Sudan (1916-1923), belong to the Meroitic period. The earlier tomb chapels have been almost completely destroyed; what is known of their decoration is indicated in the list on page 2—the cemetery of El Kurru has been published in Volume 1 of this series. The Meroitic reliefs come from the walls of oblong chapels, sometimes reached through a courtyard or a pylon, which provided the cult areas for

slender pyramids. The earliest reliefs are from the reign of Arakamani, the twenty-eighth king in the series of sixty-seven royal generations whose chronology has been established by the Boston expedition. Approximately six hundred years separate the Arakamani reliefs, of the early third century B.C., from the latest ones, dating around 350 A.D. The majority belong to the heyday of the Meroitic kingdom, 255 B.C.-A.D. 15. The representations consist mainly of funerary motives—the enthroned deceased receiving offerings, rituals, the judgment before Osiris, and the like—except for the pylon scene of king or queen with a cluster of captives, old compositions used to flaunt the might of Egypt's rulers from the beginning of historical times. The funerary themes and the beliefs to which they testify were likewise taken over wholesale from Egypt. Their sources can be traced back to the New Kingdom and to the ritual scenes which enjoyed such hypertrophied popularity from the Nineteenth Dynasty on, but the Meroitic works also share characteristics in common with contemporary reliefs of Ptolemaic and

Roman Egypt.

Despite the amazingly tenacious retention of Egyptian tradition by the artists of Meroë, the foreignness of their far southern milieu is evident, not only in the eventual barbarization or disintegration of motives, but also in the ponderous corpulence of the women, particularly of the reigning queens, and in the massive Meroitic jewelry. The clear depictions of such details provide important evidence for Meroitic archaeology.

The fine colotype plates form the main part of the book. They include photographs and plans, but the majority is the result of painstaking work by SUZANNE E. CHAPMAN. The reliefs, many now badly weathered, are clearly copied in a vivacious and steady pencil line. The short text is not intended to discuss the carvings in detail, but gives essential information, a descriptive list of the royal tombs and brief, but significant, remarks on the reliefs. There is also a useful graphic chart of the distribution of motives in the tombs.

MISS CHAPMAN and Mr. DUNHAM have given us records rich in information concerning a remarkable historical

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The classic work in field archaeology. "A book by a master . . . blessed with an easy, if sober, style. The value and interest lie in its authoritative sweep from early to medieval times . . ." *Saturday Review*. 43 illustrations in text, 32 pages of plates. \$8.50.

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phenomenon, the survival and development of cultural traditions long after their transplantation from the country of their origin into a foreign and more primitive land.

HELENE J. KANTOR

*Oriental Institute
University of Chicago*

Magnum Opus

Studies presented to David Moore Robinson, edited by GEORGE E. MYLONAS and DORIS RAYMOND, 2 volumes, lix, 876 pages, 111 plates, and xx, 1336 pages, 98 plates, frontispieces. Washington University, St. Louis, Missouri 1951 and 1952 \$25.00 and \$35.00

In addition to many other praiseworthy things, these two volumes with their 239 articles represent a fair picture (in places a self-portrait) of Classical Studies at the mid-century; for many of the contributions are not only competently written but also characteristic for their authors and their date. In spite of the enormous spread in time (from Prehistory to the Middle Ages) and in content (only philosophy is poorly represented), there is hardly an article which will not engage the interest of the ordinary Classicist. Little space is devoted to speculation, and there are many attempts at association and reconciliation of literary and archaeological evidence. While there is much new in these volumes, there is little which is exciting, mainly because the conventions of sound scholarship are so faithfully observed. This should be considered both praise and criticism. This work does great credit to its sponsor, its editors, its publisher, and its contributors among whom there are many very distinguished scholars from most countries in which Classical Studies are pursued.

A. E. RAUBITSCHKE

Princeton University

Ancient Greece—Ceramics

Protegeometric Pottery, by V. R. D'A. DESBOROUGH. xvi, 330 pages, 38 plates, 1 map. Oxford University Press, New York 1952 (Oxford Monographs on Classical Archaeology, 2) \$21.00

In the twelfth century before Christ the eastern Mediterranean world was troubled by a great movement of peoples. One of its effects was the destruc-

tion of the Mycenaean empire of pre-Classical Greece. From the darkness that follows there emerges a new civilization, the historical and Classical. Its earliest stages are known chiefly through its pottery, whose shapes and decorative patterns are in sharp contrast with those of the Mycenaean age. It is this new style or, more precisely, the phases it exhibits in the century and a half that follows its creation about 1025 B.C., that forms the subject of this admirable book. The interval, between the Mycenaean period and Geometric proper, marks the end of an old epoch and the beginning of a new and fruitful one. To its beginnings there naturally attaches an unusual interest. And since the evidence is almost exclusively ceramic, DESBOROUGH's work is not only a study of pottery but a study of history as well.

Its two principal sections are entitled *Attica* and *Outside Attica*. The first contains an analysis of the Attic Protegeometric style, based on the development of individual vase shapes; here too are discussed related vases from other parts of Greece. The second consists of an examination, by areas, of the appearance of Protegeometric pottery throughout the Greek world. The two sections are united by the author's central intention, to analyze the interrelation of the various Protegeometric styles. Perhaps the most important result of this analysis is the discovery that Protegeometric was created in Athens, and that from Athens it spread over the Aegean. The significance of this fact is made explicit, and light breaks through into one of the darkest periods of Greek history. We are enabled to see, in the second half of the tenth century before Christ, the renewal of peaceful communication among the several parts of Greece, and men from Attica reintroducing "the practice of travel and trade by sea." The discoveries of Protegeometric pottery at Smyrna, which push back the date of the Ionian Migration, were too recent to allow the author to take account of them, but they are referred to briefly in the addenda.

Of the two appendices, one sums up the evidence for the practices of cremation and inhumation in the Protegeometric period, the other provides a list of metal objects found in Protegeometric contexts. There is also an index

of sites where Protegeometric pottery has been found.

This book will long remain the standard work in its field. DESBOROUGH's observations on the structure of the several shapes, and on the composition and spacing of the decoration, are invariably exhaustive and illuminating, and so also are his descriptions of individual vases. For the style as a whole, he is led, by an enthusiasm with which one can sympathize, to make a claim that is perhaps extravagant: speaking of its origins at Athens he calls it "the first example of a new creative spirit; the ideal of harmony and proportion, which is the distinguishing characteristic of Greek art and life, was born in Athens, at this time." Without denying the presence of this characteristic in Protegeometric pottery, it may be questioned whether it is not also to be found in Mycenaean art, and in fact whether it is not this that chiefly distinguishes the art of mainland Greece in the Late Bronze Age from that of Minoan Crete.

CEDRIC BOULTER

University of Cincinnati

Mosaic Picture Book

Byzantine Mosaics, by PETER MEYER. 13 pages, 14 color plates. Oxford University Press, New York 1952 \$6.50

This picture book is intended to follow *Early Christian Mosaics* in the Berne series known as the Iris Books. MEYER has selected western mediaeval mosaics from Torcello, Venice, Monreale, Palermo and Cefalù. All of the examples are of the eleventh, twelfth and thirteenth centuries.

The relation of title to contents emphasizes the problem of interpreting the word "Byzantine," but the brief text does not guide the reader adequately toward the interesting archaeological and artistic problems involved. No reference is made to the growing literature dealing with mosaics, nor is the relationship between the subject matter and eastern examples discussed.

The quality of the plates is fairly high if one considers the many difficulties encountered in the reproduction of mosaic paintings. Here the problems of color, register, gloss and paper have been generally well met.

WILLIAM MACDONALD

Wheaton College

NEW BOOKS

Selected at the editorial offices from various sources, including bibliographical publications, publishers' announcements, and books received. Prices have not been confirmed.

ALTHEIM, FRANZ. *Alexander und Asien. Geschichte eines geistigen Erbes*. 328 pages, 2 maps. Max Niemeyer Verlag, Tübingen 1953 DM 32

ALTHEIM, FRANZ, and RUTH STIEHL. *Asien und Rom. Neue Urkunden aus sasanidischer Frühzeit*. 87 pages, 15 plates. Max Niemeyer Verlag, Tübingen 1952 DM 16.40

ANDREWS, KEVIN. *Castles of the Morea*. xix, 274 pages, 231 illustrations in text, 40 plates. American School of Classical Studies at Athens, Princeton 1953 (Gennadeion Monographs, Volume IV) \$15.00

BAILEY, H. W., editor. *Khotanese Texts. Volume II*. 164 pages. Cambridge University Press, London 1953 35s.

BERRIMAN, A. E. *Historical Metrology*. 224 pages, 81 figures. E. P. Dutton & Co., Inc., New York 1953 \$3.75

BROGAN, OLWEN. *Roman Gaul*. x, 250 pages, 35 figures, 16 plates, 1 map. Harvard University Press, Cambridge 1953 \$4.25

BROWN, JOSEPH E. *The Sacred Pipe*. xx, 144 pages, 2 figures, 4 plates. University of Oklahoma Press, Norman, Oklahoma 1953 \$3.00

CLARK, J. D. *The Prehistoric Cultures of the Horn of Africa*. 416 pages, 66 figures, 56 plates. Cambridge University Press, London 1953 84s.

FERNDON, EDWIN N., JR. *Tonala, Mexico: An Archaeological Survey*. xvi, 126 pages, 17 figures, 24 plates, 5 maps. School of American Research, Santa Fe, New Mexico (Monographs of the School of American Research, No. 16) 1953 \$6.00

FIELD, HENRY. *The Track of Man: Adventures of an Anthropologist*. 448 pages. Doubleday & Co., New York 1953 \$5.95

HANFMANN, G. M. A. *Observations on Roman Portraiture*. 55 pages, 3 plates. Latomus, Brussels 1953 (Collection Latomus, Volume XI) 60 fr.

HARRISON, EVELYN B. *The Athenian Agora. Results of Excavations Conducted by the American School of Classical Studies at Athens. Volume I, Portrait Sculpture*. xiv, 114 pages, 49 plates. American School of Classical Studies at Athens, Princeton 1953 \$6.00

HAYES, WILLIAM C. *The Scepter of Egypt*. xviii, 399 pages, 230 figures, 1 map. Harper & Bros., New York 1953 \$12.50

HENLE, JANE E. *A Study in Word Structure in Minoan Linear B*. v, 185 pages. Privately printed, New York 1953

Ilias Ambrosiana. 120 pages, 58 color plates. Urs Graf, Switzerland 1953 \$140

IPSER, KARL. *Vatican Art*. 198 pages, of which 160 are plates. Philosophical Library, New York 1953 \$7.50

JANIN, R. *La géographie ecclésiastique de l'empire byzantin. Première partie: Le siège de Constantinople et le patriarcat oecuménique. Tome III: Les églises et les monastères*. xvii, 610 pages, 4 maps. L'Institut Français d'Études Byzantines, Paris 1953

LEHMANN, HENRI. *Les civilisations précolombiennes*. 127 pages, 18 figures. Presses Universitaires de France, Paris 1953

LEVY, G. R. *The Sword from the Rock*. 236 pages. Faber and Faber, London 1953 30s.

Libya. Anthropologie, archéologie, préhistoriques. Nouvelle série. Tome I. Gouvernement Général de l'Algérie. Direction de l'Intérieur et des Beaux-Arts. 1953

MORIN, F. ALFRED. *The Serpent and the Satellite*. x, 467 pages, 64 figures. Philosophical Library, New York 1953 \$4.75

MUKHERJEE, R., C. R. RAE and J. C. TREVOR. *The Ancient Inhabitants of Jebel Moya*. 142 pages, 3 plates. Cambridge University Press, London 1953 40s.

MYRES, JOHN L. *Herodotus, Father of History*. vii, 315 pages, 25 figures. Clarendon Press, Oxford 1953 \$6.00

PARSONS, EDWARD A. *The Alexandrian Library*. xiv, 468 pages, 14 figures. Elsevier Press, New York 1952 \$7.50

PESCE, GENNARO. *Il Tempio d'Iside in Sabratha*. 78 pages, 44 figures, 12 plates. "L'Erma" di Bretschneider, Rome 1953 (Monografie di Archeologia Libica, Volume IV)

PIGGOTT, STUART. *The Neolithic Cultures of the British Isles*. 464 pages, 64 figures, 12 plates. Cambridge University Press, London 1953 70s.

PORTER, MURIEL N. *Tlatilco and the Pre-Classic Cultures of the New World*. 104 pages, 16 figures, 14 plates. Wenner-Gren Foundation for Anthropological Research, New York 1953 (Viking Fund Publications in Anthropology, No. 19) \$2.50

RECINOS, ADRIAN, and DELIA GOETZ. *The Annals of the Cakchiquels, Translated from the Cakchiquel Maya, and Title of the Lords of Totonicapan. Translated from the Quiché text into Spanish by DIONISIO JOSÉ CHONAY, English version by DELIA GOETZ*. ix, 217 pages. University of Oklahoma Press, Norman, Oklahoma 1953 \$3.75

RICHÉ, PIERRE. *Les invasions barbares*. 124 pages. Presses Universitaires de France, Paris 1953

RUMPF, A. *Malerei und Zeichnung*. xxxvi, 199 pages, 21 figures, 72 plates. C. H. Beck'sche Verlagsbuchhandlung, München 1953 (Handbuch der Archäologie, im Rahmen des Handbuchs der Altertumswissenschaft, Volume IV, 1) DM 38

Saint Sophia of Ochrida: Preservation and Restoration of the Building and its Frescoes. Report of the Unesco Mission of 1951, by FERDINANDO FORLATI, Head of the Mission, CESARE BRANDI and YVES FROIDEVAUX. 27 pages, 33 figures. UNESCO, Paris 1953 \$1.00

SELTMAN, CHARLES. *The Twelve Olympians*. 196 pages, 13 plates. Pan Books, Ltd., London 1952 2s 6d.

SEZNEC, JEAN. *The Survival of the Pagan Gods: The Mythological Tradition and Its Place in Renaissance Humanism and Art*. xvii, 376 pages, 108 figures. Pantheon Books, New York 1953 (Bollingen Series, Volume 38) \$6.50

SPINAZZOLA, VITTORIO (Opera postuma a cura di SALVATORE AURIGEMMA) *Pompeii alla Luce degli Scavi Nuovi di Via dell'Abbondanza (anni 1910-1923)*. Volume I: lxix, 680 pages, 757 figures, 10 plates. Volume II: 430 pages, 403 figures, 1 plate; Album, 98 plates. Libreria dello Stato, Rome 1953 80,000 Lire

TUCCI, GIUSEPPE. *Tibetan Painted Scrolls*. 2 volumes. xxiv, 788 pages, 13 plates; Portfolio 256 plates (25 in color). Libreria dello Stato, Rome 1952 150,000 Lire

VERRILL, A. HYATT, and RUTH VERRILL. *America's Ancient Civilizations*. xvii, 334 pages, 34 figures, 24 plates. G. P. Putnam's Sons, New York 1953 \$5.00

WENDORF, FRED. *Salvage Archaeology in the Chama Valley, New Mexico*. xiii, 124 pages, 23 figures, 48 plates. School of American Research, Santa Fe, New Mexico 1953 (Monographs of the School of American Research, No. 17)

WHEELER, SIR MORTIMER. *The Indus Civilization*. 96 pages, 12 figures, 24 plates, 2 plans. Cambridge University Press, London 1953 (The Cambridge History of India, Supplementary Volume) 30s.

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